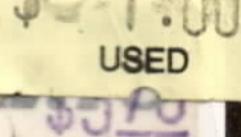
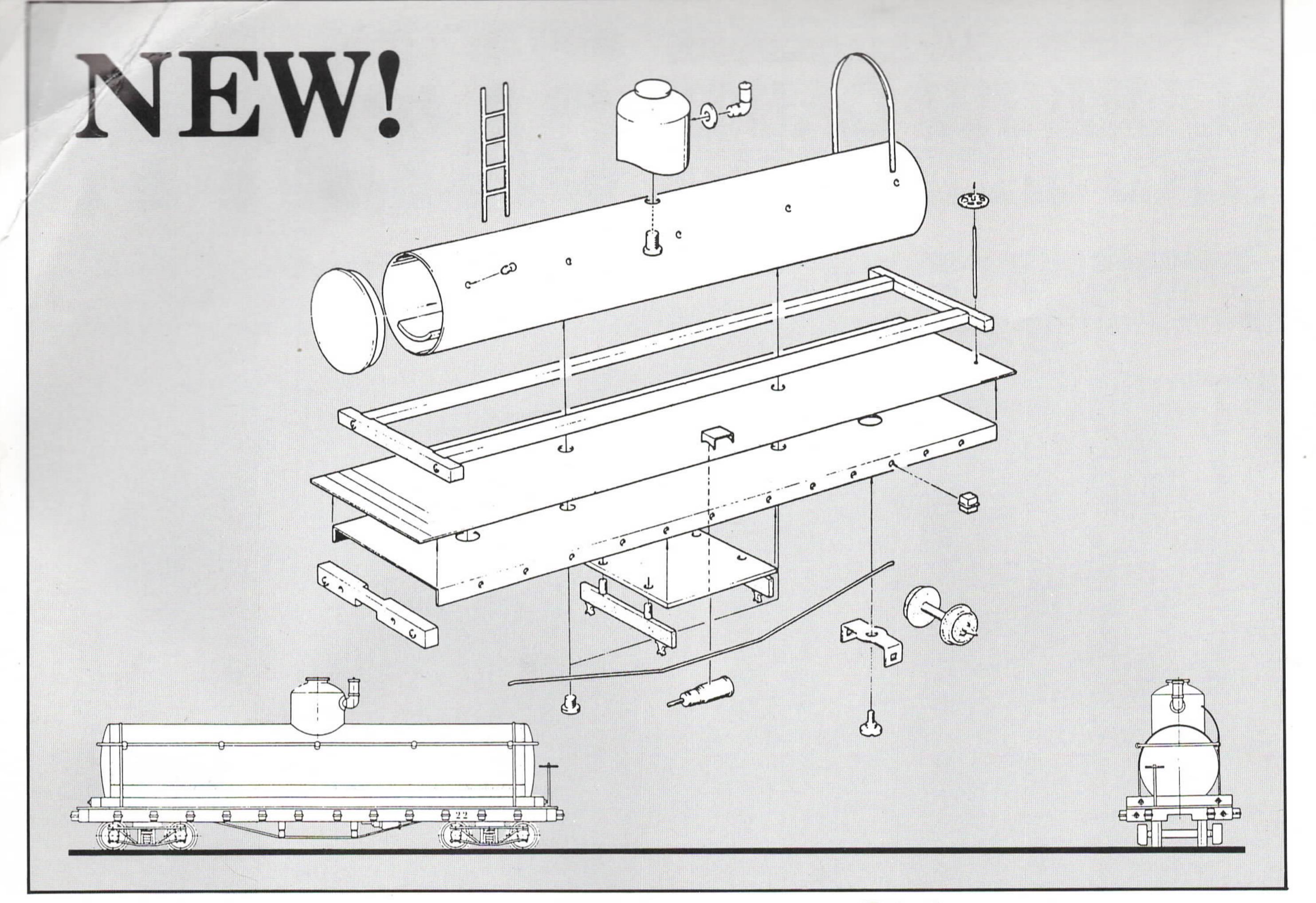
NARROW GAUGE CAZETTE AND SHORT LINE CAZETTE

Accurate Information for Fine Modelbuilding - Nov/Dec 1984







PORTLAND CO. B&H TANK CAR BUILT 1899

our ex-Army Plymouth nudges
Portland tankers onto a narrow spur
just down from the mine. They're a little worse for wear but still servicable and the price was right. \$44.95 - available only in HOn2½ now from Lambert. A fine SANGO kit.

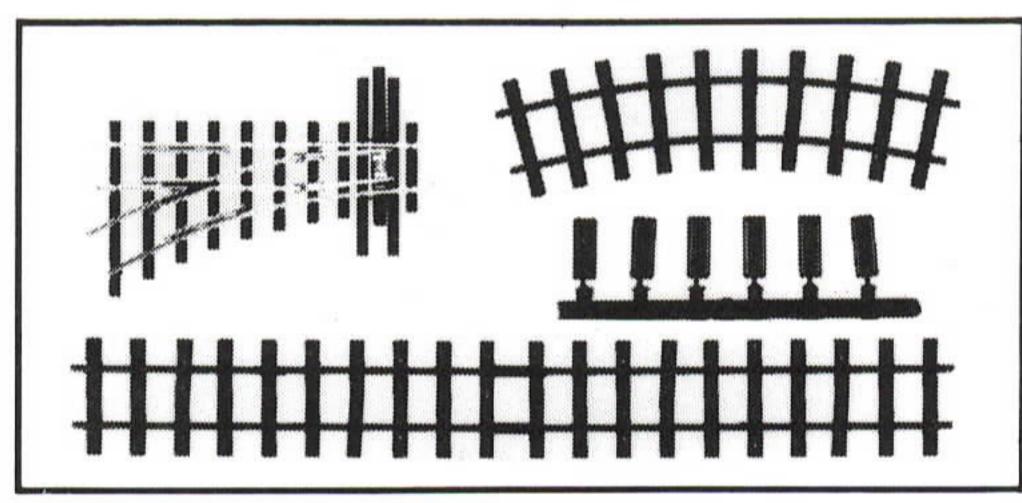


eed a little longer-legged teapot for the passenger run? Look for the new SR&RL Forney #10, RTR from Lambert. Under \$200.



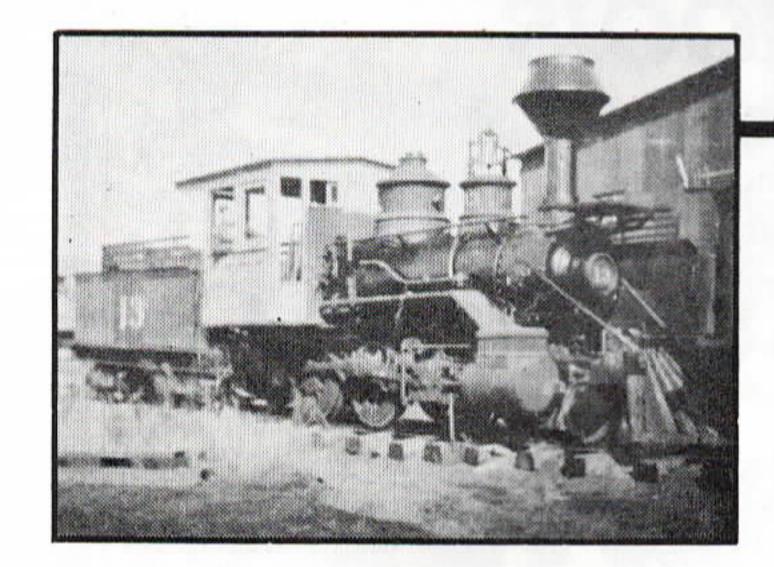
ur 18 Ton Climax will be re-run in HO, HOn3 & HOn2 1/2 December '84. \$189.95 - reserve now if you missed it!

ET ON THE RIGHT TRACK. QUICK! Ask for LAMBERT/-SHINOHARA HOn30 code 60 nickel-silver trackage for your Lost Molino line. Available in two degrees of turnouts; 30° curved; 3, 4, & 6" straights and 20" flextrack. All trackage has the correct HO scale tie width and spacing for the ultimate in realism.





NARROW GAUGE GAZETTI



NOVEMBER/DECEMBER 1984

VOLUME 10, NUMBER 5

SPECIAL FEATURE

26

The Minneapolis Motor Line

A soda motor? by Albin Lee

FEATURES

- The Carter Connection

 A mystery resolved?

 by Eric Jewett
- The N Gauge Shays of Wilbur Epperly, Jr.
 Cute little sidewinders.
 by Bob Brown
- 36 Scratch-building an ET&WNC Hopper Car A black diamond hauler. by Julian Cavalier
- Creating a Specific Time Period Using Photo Backdrops
 Expanding your horizons.
 by Danny M. King
- The Shoshoni
 Yes, another boat!
 by George Konrad
- A Wells Fargo Concord Coach in HO

 A bit of the old west from Holland.

 by Annemarie Sicherer-Roetman
- Two Colorado & Southern Cars
 HOn3 cars for Clear Creek.
 by Heather Clark
- Down at the Station, Part 2

 The Operator.

 by Rick Steele
- 60 Up Clear Creek on the Narrow Gauge, Part 29
 The Idaho Springs water tank.
 by Harry Brunk
- The Sawmill Chronicles, Part 3
 The base and underframe.
 by Reg Shaffer
- Ore Processing, a Modeler's Perspective, Part 4
 The base for your mill.
 by John Hitzeman
- 70 The Colorado Railroad Museum Expansion.
 by Don Heath
- 78 Extra Narrow Gauge Junction
 A church social.
 by Dick Andrews
- Model Makers Notebook
 Logging scenery.
 by Al Armitage

PLANS

- 27 Minneapolis, Lyndale & Minnetonka Ry. Soda Motor
- 28 ML&M Ry. Open Bench Passenger Car
- 28 ML&M Ry. Baldwin Steam
 Dummy
- 30 ML&M Ry. Baldwin 2-6-0
- 30 ML&M Ry. Passenger Cars
 All the above by Albin Lee
- 38-39 ET&WNC Hopper Car by Julian Cavalier
- 48-49 The Shoshoni
 by George Konrad
- 50-51 Magma Arizona Copper Company 2-4-2 #4 by Ed Gebhardt
- 62-63 Idaho Springs Water Tank by Harry Brunk
- 74-75 Virginia & Truckee Carson City, NV Oil Tank
 by Gary Caviglia

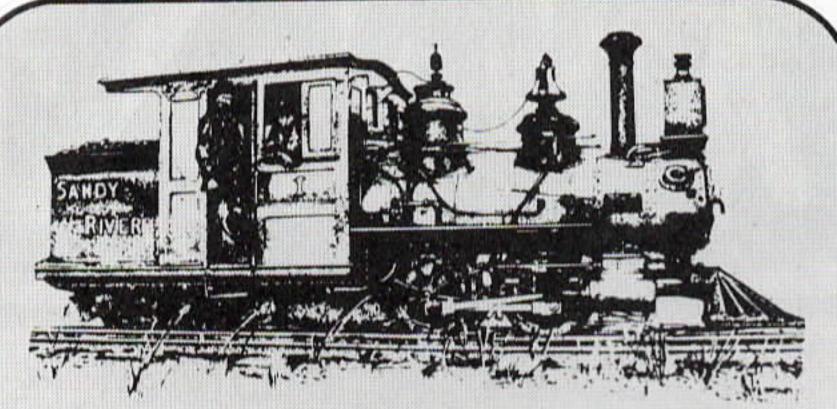
DEPARTMENTS

- 5 Robert's Ramblings
- 16 New In Review
- 19 In Brief
- 22 Narrow Gauge Scene D&RGW 6000 Series Flatcars
- **84** Gazette Gallery
 Fourth National NG Convention
 Winners
- 89 Book and Video Reviews
- 96 Riptrack

COVER

Colorado & Southern #9 drifts under the Devil's Gate Viaduct on the Georgetown Loop. This splendid watercolor was painted by Jan Rons and is now in the Bob Dezelin collection.

The NARROW GAUGE AND SHORTLINE GAZETTE (ISSN 01 48-2122) is published in March, May, July, September, November, and January by Benchmark Publications, Ltd., P.O. Box 26, Los Altos, CA 94022. Subscription Rates: (United States) 2nd class mail – \$15.00 per year, 1st class mail – \$30.00 per year. [Foreign Rates (including Canada)] Surface—\$20.00 per year, 1st class Canada—\$30.00 per year (U.S. funds please). Second Class Postage paid at Los Altos, CA 94022 and at additional entry offices. Postmaster send address changes to Benchmark Publications, Ltd., P.O. Box 26, Los Altos, CA 94022. The contents of this magazine must not be reprinted without permission of the publisher. THE NARROW GAUGE AND SHORTLINE GAZETTE incorporates Finelines and The Slim Gauge News. Printed in U.S.A. Copyright 1984 Benchmark Publications, Ltd. All rights reserved.



NARROW GAUGE AND SHORT LINE CAZETTE

Editor and Publisher Robert W. Brown

Business and Office Manager Irene L. Brown

Art Director

Sharon Olsen

Typography

John Bird

Associate Editors
Gene E. Deimling

Charles W. Getz

Contributors

Richard Andrews Alan Armitage Harry Brunk Gary Caviglia

John Hitzeman

Marc Horovitz Gary Nash Reg Shaffer Rick Steele Ted Wurm

Subscription Rates:

United States

2nd class mail \$15.00 per year 1st class mail \$30.00 per year

Foreign Rates (including Canada)

Surface......\$20.00 per year 1st class Canada......\$30.00 per year

We cannot accept checks on overseas banks unless paid through a U.S. bank.

Authors:

Articles, photographs, and plans are welcome. When requested we will endeavor to return material in good condition. Payment upon publication. Author's instructions available upon request.

Advertising:

Advertising rates available upon request. Ad makeup service and typesetting available. Benchmark Publications, Ltd. reserves the right to refuse ads not keeping with the policies of the GAZETTE.

Dealers:

Dealers write for dealer terms directly to Benchmark Publications, P.O. Box 26, Los Altos, CA 94022, USA.

Returns: Send entire magazine please.

Send all correspondence to:

Benchmark Publications, Ltd.
One First Street, Suite N
P.O. Box 26
Los Altos, CA 94022

One of the East Coast's Largest Selections

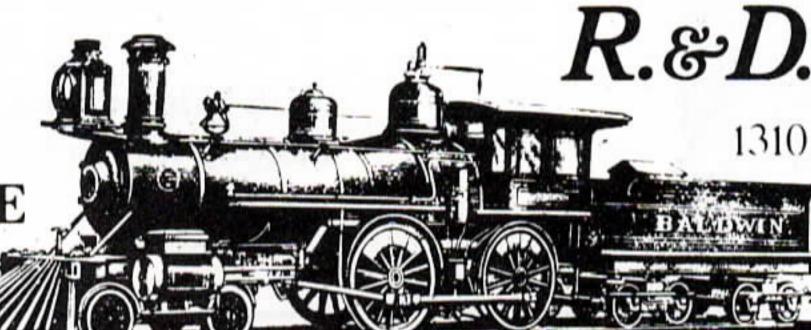
Model Railroad Precision Tools

from Germany, Switzerland and the U.S.A.

Tools, equipment & supplies, 1000's of hard-to-find essentials by Lindstrom, Foredom, L & R, Berg, Grobet, Busch, Dixon, Romanoff, Swest, others.

Catalogues \$3
(\$5 in Canada)

—REFUNDABLE
with first order



R.&D. Supply Co.

1310 Apple Avenue, Dept NG Silver Spring, Md 20910 301/588-7296



SEPTEMBER 18-22, 1985 COLUMBUS, OHIO

Clinics, Manufacturer's Displays, Layout Tours, Popular Vote Model Contest, Popular Vote Photo Contest, Modular Layouts, Hobby Shops, Auction, Self-Guided Prototype Tours

Manufacturer/Dealer Information Available Upon Request

Pre-Registration (Before 8-1-85) \$40.00
Registration (After 8-1-85) \$55.00
One-Day Registration \$25.00
NO REFUNDS AFTER SEPTEMBER 10, 1985!

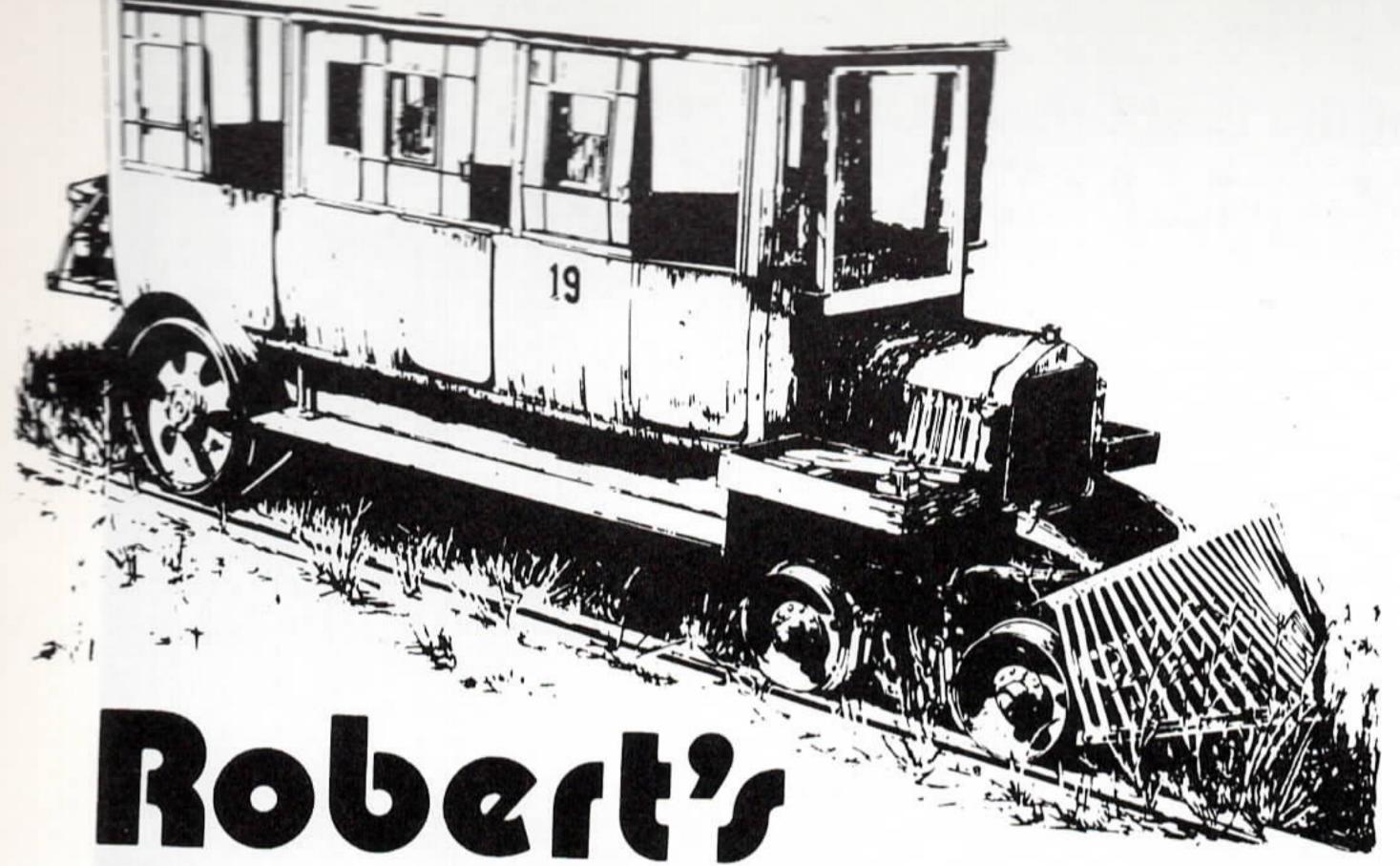
FIRST 100 PRE-REGISTRATIONS QUALIFY FOR DOOR PRIZE DRAWING

HOTEL ACCOMMODATIONS:

University Hilton Inn Narrow Gauge Convention 3110 Olentangy River Road Columbus, Ohio 43202 (614) 267-7461 Single — \$48.00 Double — \$54.00

REGISTRATION:

5th National Narrow Guage Convention 4929 Atwater Drive Columbus, Ohio 43229



Roberty Ramblings....

The Fourth National Narrow Gauge Convention Photos by Bob Brown

We almost broke a thousand at Denver this year. The Fourth National Narrow Gauge Convention was a great success with about 940 narrow gaugers attending. The weather was great and the snows held off until after we left. The manufacturers' room was full and there were so many clinics I couldn't see them all. The layout tours I went on were great; in short, I had a fantastic time and I think the other 939 participants did too.

Starting on Wednesday, September 19, the convention committee kept things hopping. Lee Brown, Les Grenz, Jim Schwingle, Jim Trowbridge, and Don Winter, who made up the

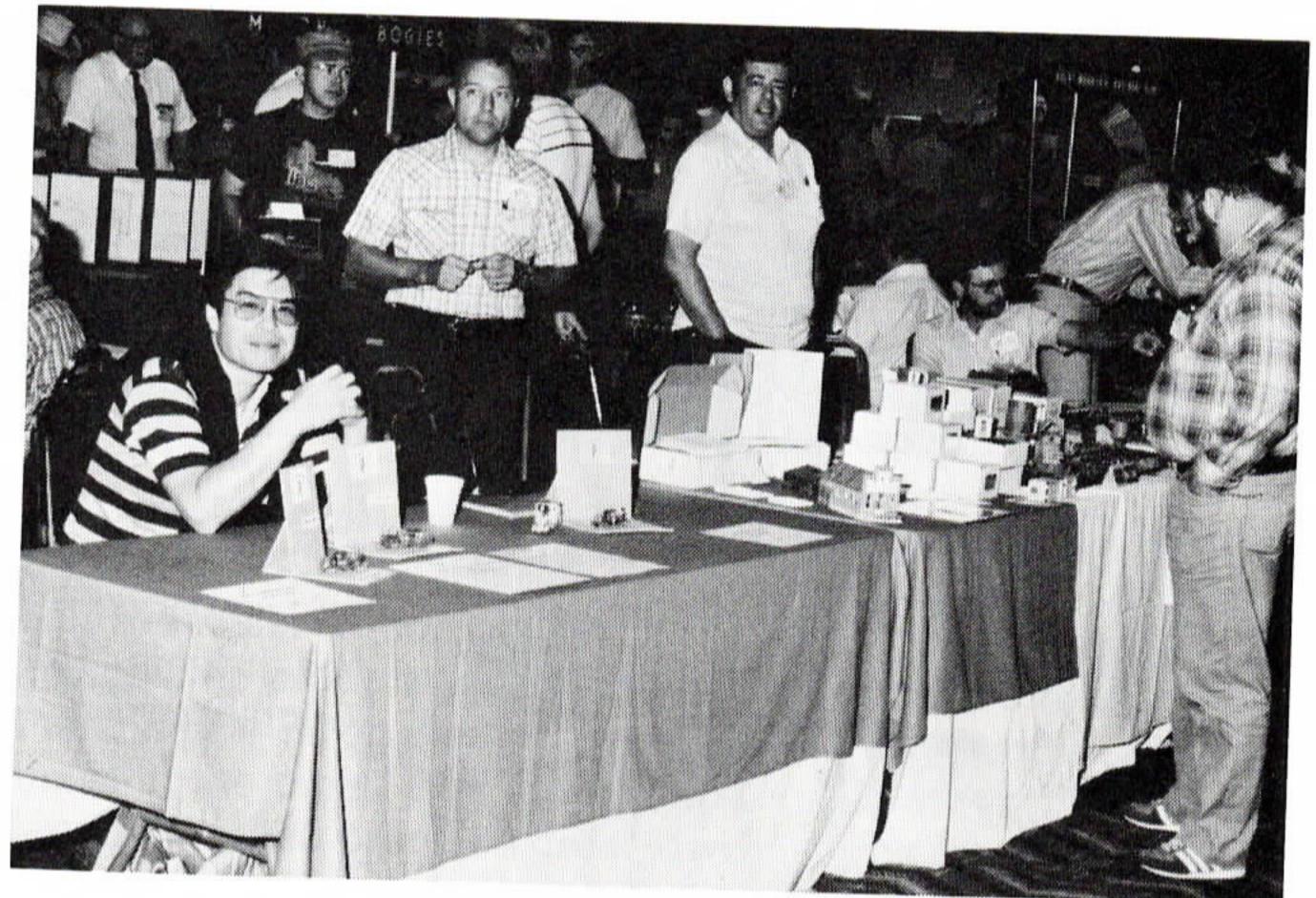
committee, are to be congratulated.

There were 38 clinics scheduled, covering most aspects of the narrow gauge world and narrow gauge modeling. GAZETTE authors Peter Barney, Dwayne Easterling, Charlie Getz, Marc Horovitz, George Konrad, Mel McFarland, Robert Sloan, Al Turner, Art Wallace, and Scott Zieske all gave clinics. I also gave a clinic on my own Tuolumne Forks.

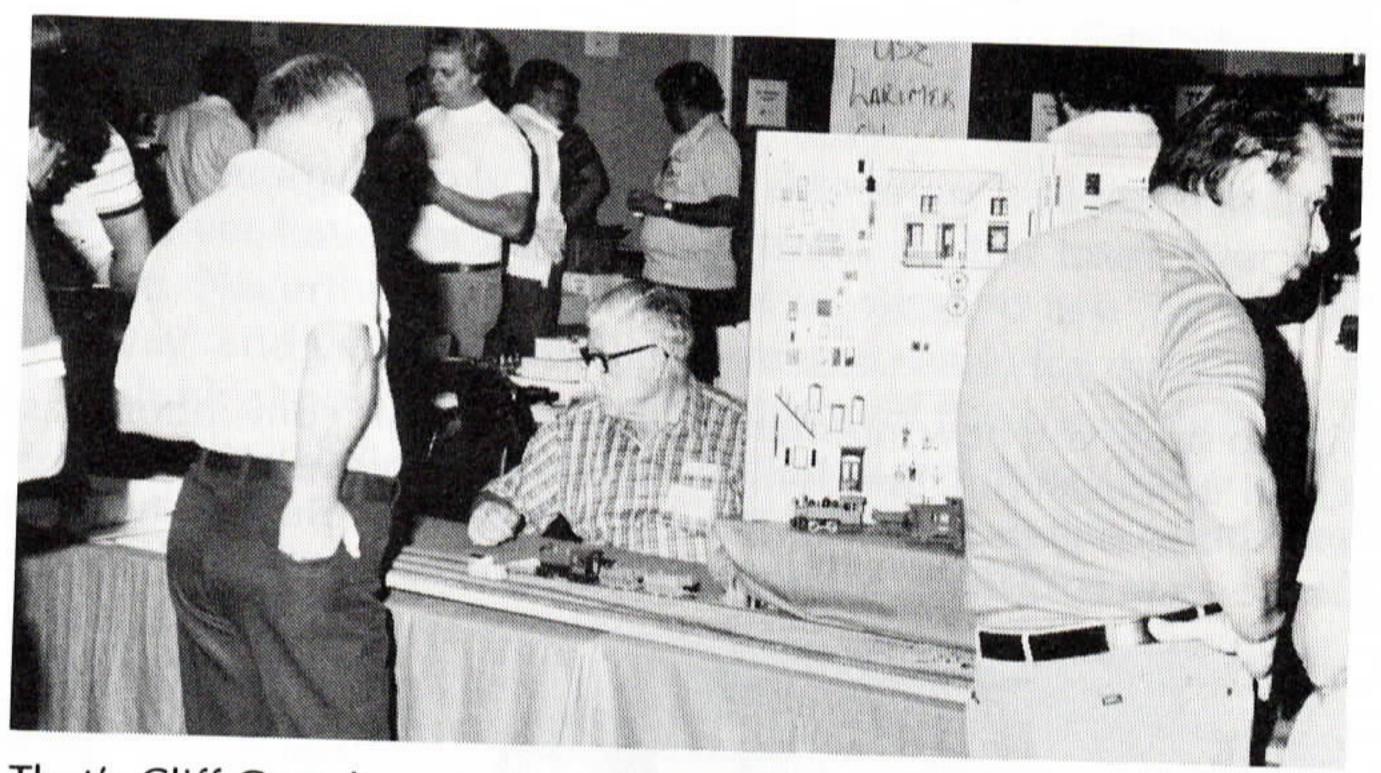
Fifty-eight manufacturers attended and provided displays of their products. There were so many, in fact, that the manufacturers' room overflowed and many displays were held in hotel rooms and an annex down near Caboose Hobbies in Denver. The committee provided signs and a list of all of the out-of-hall exhibits so no one got lost. There were many new items on display, ranging from Nn3 models up to large scale ride-on narrow gauge trains. GAZETTE advertisers, Builders in Scale, were showing their new Jefferson station in HO, Caboose Hobbies had a display complete with a never empty coffee pot. Classic Miniatures, Colorado Scale Models, Coronado Scale Models, and Crummy Products were there. Jim Finnell, Flying Zoo, and Grandt Line (with its new On3 dump car and almost completed On3 work Goose #6) were there. The Great American Buckle Company was there, Keller's Onboard sound reverberated, and North West Shortline displayed its new drives. Overland had a display case full of new models, and Power Systems was showing off its new small size receivers. PBL had its Sn3 model of Chama, and Precision Scale was showing Al Armitage's beautiful portable layout. Rail Craft, Rick's Grande Narrow Gauge Car Shop, R. Robb, The Rocky Mountain Railroad Club and the Rock Quarry were all there. Roger's Locomotive Shop, Sandy River Car Shops, the Sidestreet Banner Works, Sloan, Taurus, Tomalco, Trainmaster, Trains of Texas, Triangle Scale, Vintage Reproductions, V&T Shops, WB Video, Wallace Enterprises, Walthers and RG&W Shops (from Switzerland) all provided displays of their products.

The GAZETTE was there along with John Hitzeman, who displayed his HO scale Little Helen mill along with his new American Model Builders mill machinery. Many thanks for helping us handle our booth, John.

A typical activity at the GAZETTE booth. This unidentified narrow gauger is taking a photo of John Hitzeman's Little Helen Mill.



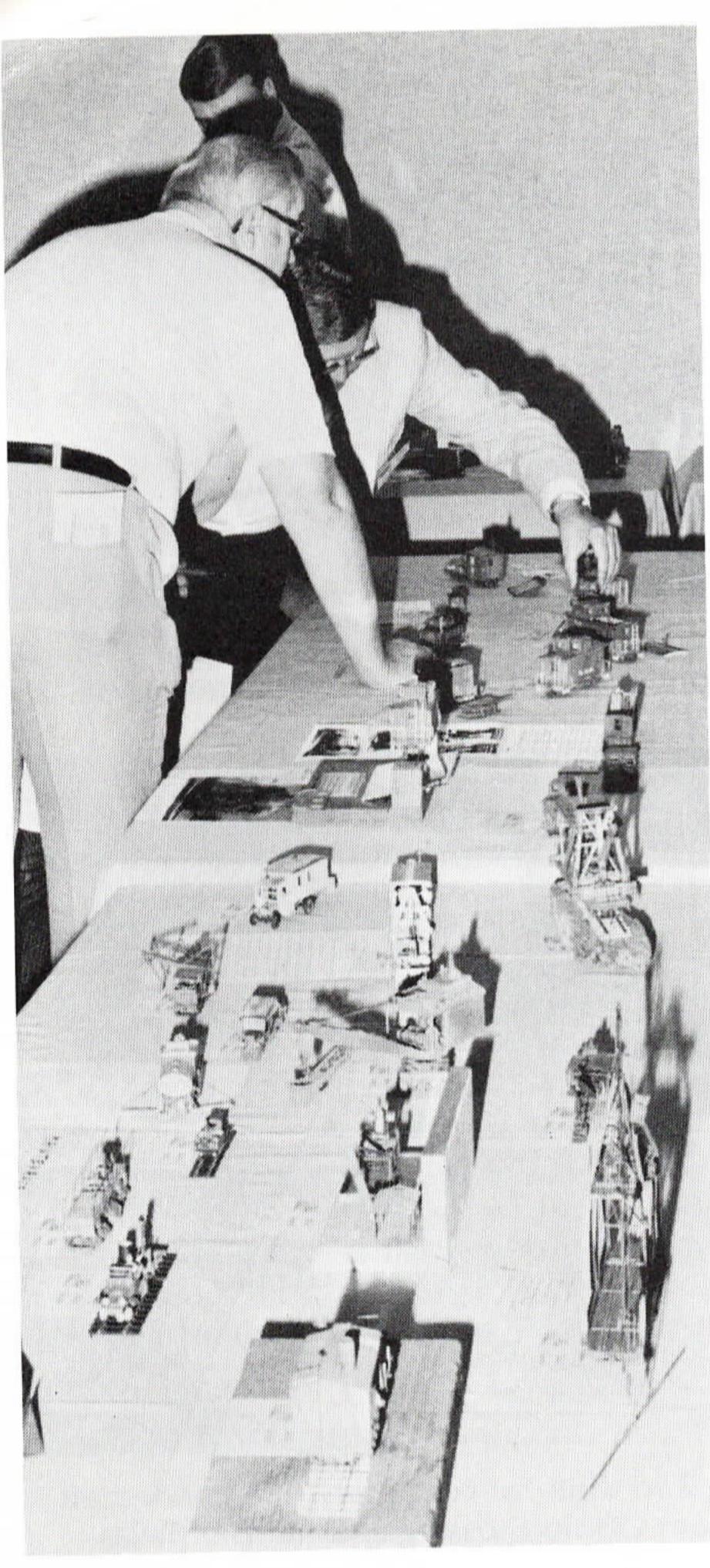
Shozo Inoue of Flying Zoo waits for customers. The gentlemen in the background are from Cibolo Crossing and Trains of Texas.



That's Cliff Grandt seated at his booth. Two great new products at the show were the Grandt Line On3 dump car and the (almost ready) Work Goose #6 in On3.



Jan Rons, Jim Finnell, and Mike Pearsall combined their considerable talents to present a very successful art show at the convention. Here are some of the paintings on display. That unidentified conventioneer seems to be resting a bit before moving on to the next exhibit.



A candid shot of two fans trying to choose their favorite model in the contest room.

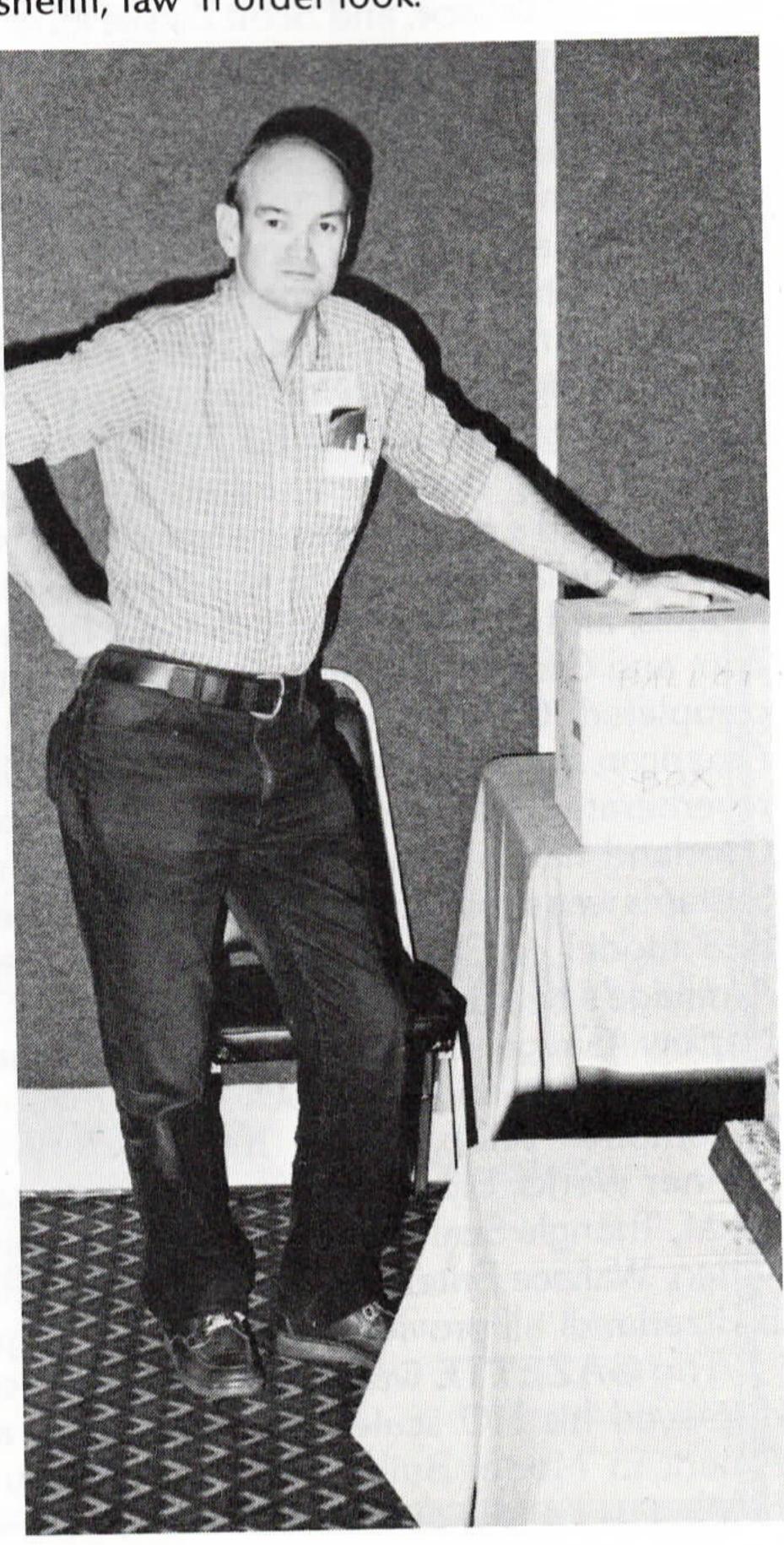


Yes, it is up. Here is the Georgetown Loop Bridge. The camera is looking back towards Georgetown.

Just to show you how international the "national" convention was, here is the Narrow Gauge Guild of Stockholm, Sweden. In a pleasant surprise at the convention, they very graciously elected Bill Peters, Russ Simpson, Charlie Getz and myself honorary members of their Guild. There were **GAZETTE** readers from many other countries there also.

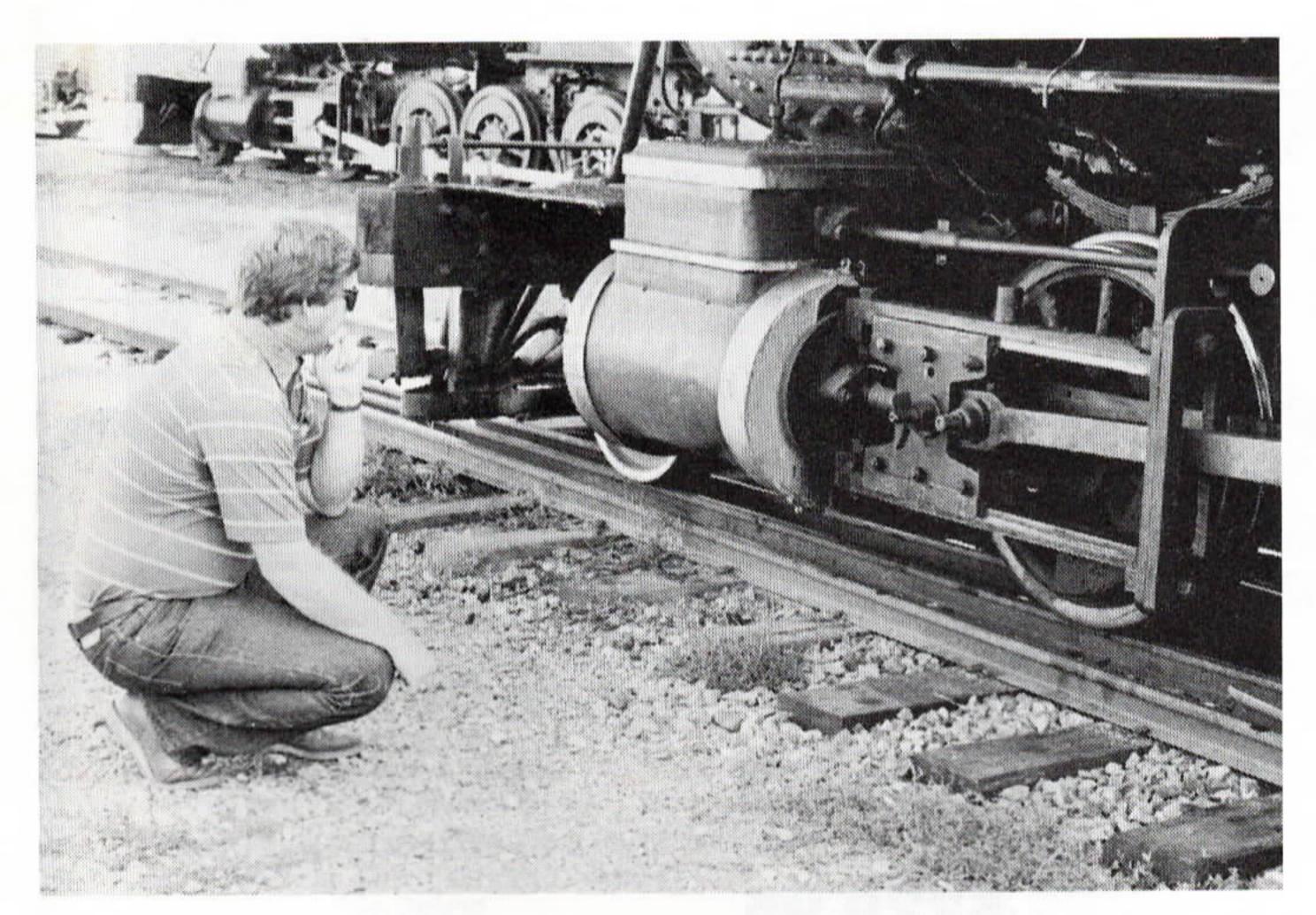


Tom Madden (who was in charge of the contest room) guarding the ballot box. I sure wouldn't want to mess with him - Tom didn't need a badge or gun to achieve that western sheriff, law 'n order look.





Number 346 entertained us at the Colorado Narrow Gauge Museum.



Rapture at the Colorado Railroad Museum. An unidentified fan meditates on the cylinder and crosshead of #346.



Cliff Grandt, the Dean of Styrene, in front of Goose #6, ruler in hand.

There were 19 layouts on display plus Sundance Publications with their Sn3 module. The annex next to Caboose Hobbies held the Keller Onboard sound display, an LGB modular layout, and an On3 modular layout. I was impressed with the quality of the fine layouts on display. There was no way I could see all of them in the time I had, but I made a valiant try. Each of the layouts I visited provided great ideas, but the most valuable for me was Don Meeker's On3 layout. His tramway house on this layout is made of foam core (also called foam board). Don told me how he did it and promised to write an article for the **GAZETTE** on the subject. I went right out and bought some foam core for a big building I want to make for Tuolumne Forks.

The Georgetown Loop was not operating. It seems that they do not yet have approval to run trains on the track over the bridge. Nevertheless, I think all of us went to see the bridge anyway, and yes, it is actually there and ready for operation.

I think almost everybody that attended the convention also made visits to Silver Plume, Georgetown, and other Clear Creek areas. I want to thank Charlie Getz for being such a good tour director. He took Shozo and Harumi Inoue of Flying Zoo and me to Cripple Creek and Victor, Colorado. He drove us down some old right-of-way on a memorable trip. The Colorado Railroad Museum in Golden was open and both Gooses #2 and #6 were running along with steam engine #346.

The contest was beautiful and the winners can be seen in this issue's Gallery. Sorry I didn't get the photo contest winners. If someone will send them to me I'll publish their names in the next issue. The raffle raised over \$1000 for the Colorado Railroad Museum. The auction was a success and Charlie Getz auctioned off a copy of the latest **GAZETTE** for \$20.00 with the proceeds going to the Colorado Railroad Museum.

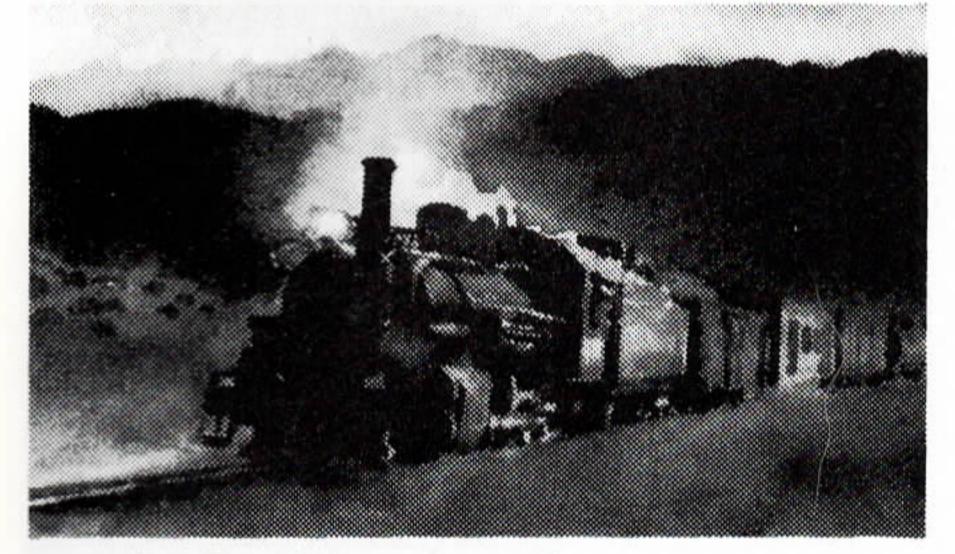
The next convention, which will be in Columbus, Ohio, was introduced in a fine presentation at the awards assembly Saturday night by Lee Rainey and Harry Sage. It looks like Columbus will be another great convention so let's all get over there and support it all the way. The 1986 convention will be back in Denver, so if you missed this one, you have another chance to enjoy the great layouts and fine scenery and railroad history of the Denver area.

Again, my thanks to the convention committee for a job well done. You guys certainly know how to put on a convention.

Bob Brown



The Santa Fe Branch of the Denver & Rio Grande Western



A Calendar for 1985

A month-by-month look at the historic Santa Fe branch of the D&RGW in watercolors by Ted Rose. Twelve premium color reproductions on quality stock, each with clear margins, accompany large, useable, easy-to-read calendar months. 12 x 9 inch format includes history, information, captions.

\$12.95 postpaid (first class or UPS) (New Mexico residents add \$.63 sales tax each.)

To order call toll-free

800-621-5199

(in Illinois call 800-972-5858), and use Visa/Mastercard. Or send check, money order, or Visa/MC number and exp. date with name and address to: Hod Carriers Ink

P.O. Box 266 Santa Fe, NM 87504

When ordering, consider what great gifts this calendar would make and order accordingly. Please allow two weeks for delivery from receipt of order.

COLORADO'S MOUNTAIN RAILROADS

By Robert A LeMassena

RARE FEATURE—
15 page map
originally published by
the ROCKY MOUNTAIN
RAILROAD CLUB in 1963,
E J Haley cartographer.

\$49.00

(USA & CANADA)

AN ENCYCLOPEDIA OF THE COLORADO RAILROAD SCENE

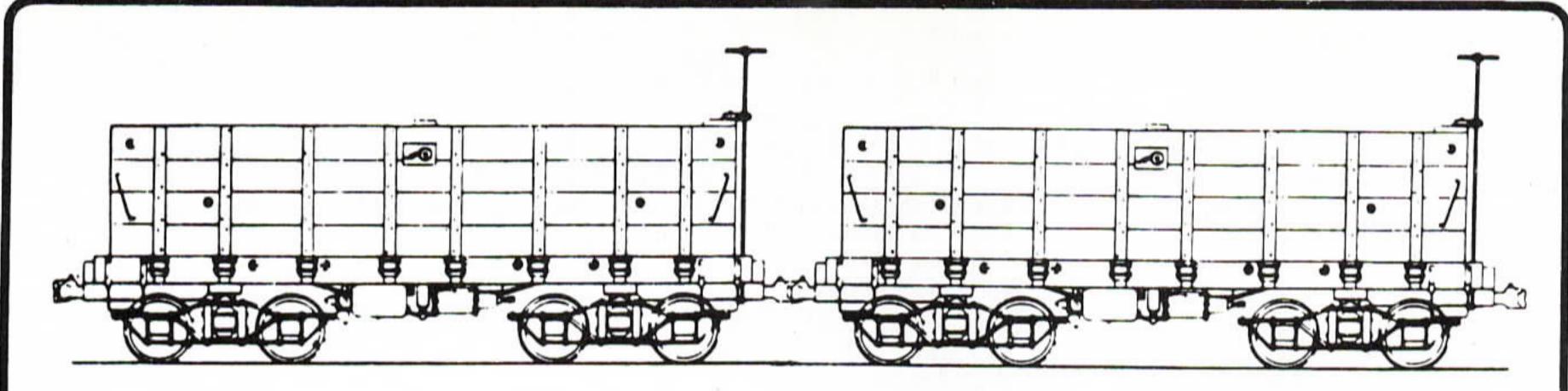
Embraces 200 railroads - alphabetical arrangement, from 100-MPH racetracks at 3,000 foot elevation to a cog-line at 14,110 foot Pikes Peak. Short histories of all companies, motive power, listings showing origin, renumbering, rebuilding, and disposition of locomotives are included.

50 FULL COLOR VIEWS 600 BLACK & WHITE PHOTOS 384 PAGES 8½ X 11

MASTERCARD/VISA ACCEPTED.

SUNDANCE PUBLICATIONS Ltd.
250 BROADWAY, DENVER, COLORADO 80203

Send for FREE Catalogue



TAURUS PRODUCTS

P.O. BOX 6534 ORANGE, CA. 92667

Neat stuff for the Model Railroader

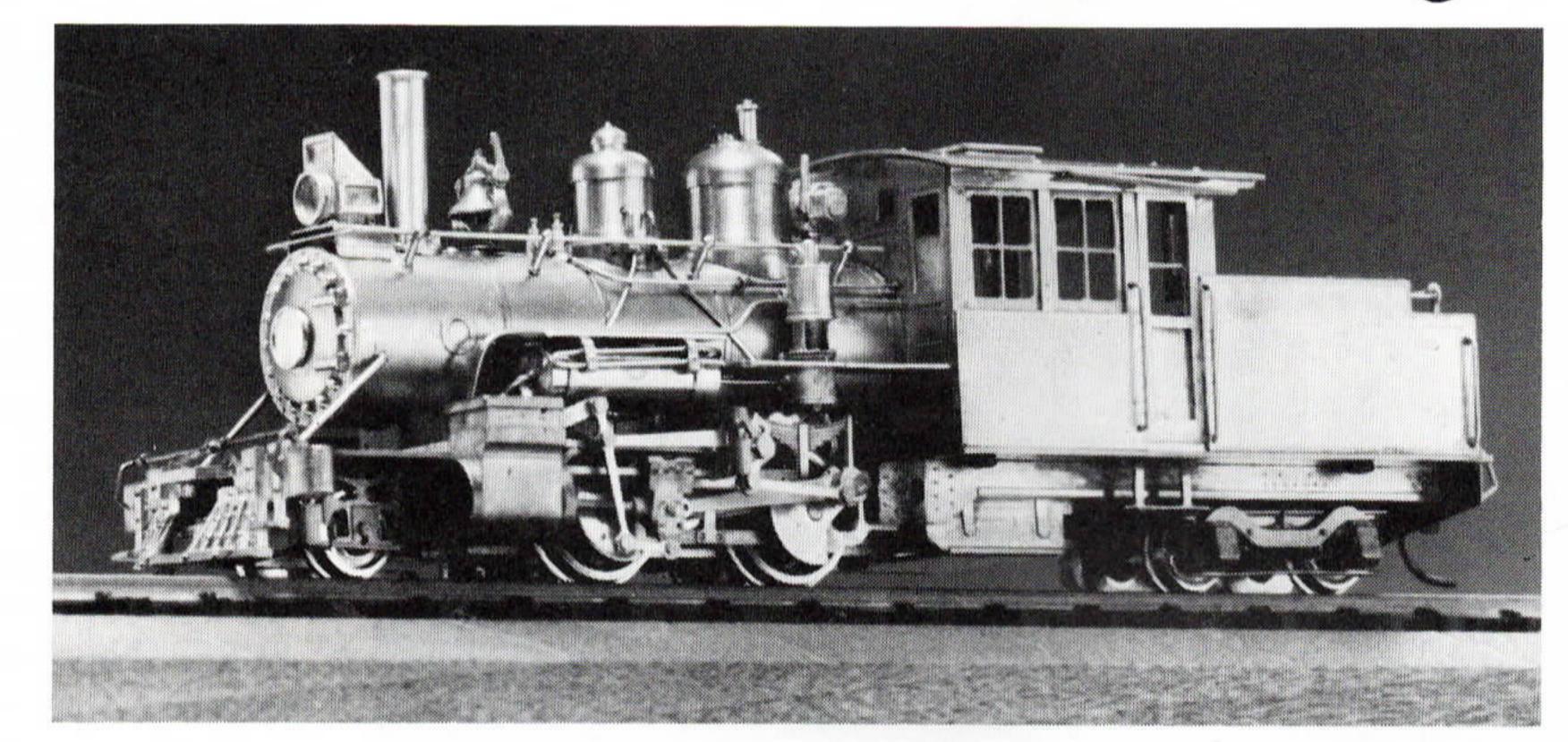
20 FT. WOOD ORE CARS

(2 IN 1 KIT) KIT #305 HO / HO_N3 \$13.95

(Less Trucks & Couplers)



Your Favorite Forney



HOn30 SR&RL #10 2-4-4T

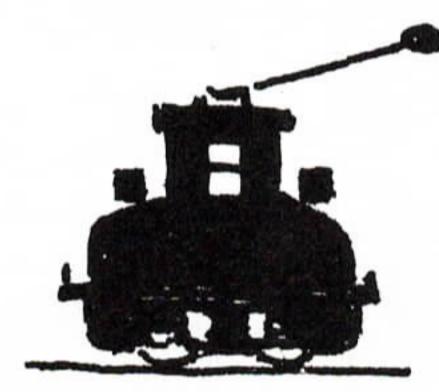
Production model

Assembled, ready to run.

\$229.95

- Do not miss! Limited run, no plans for re-run.
- Your dealer can order for you from Flying Zoo.

New from Flying Zoo



HO and HOn30 General Electric 16 ton Electric locomotive

Assembled, ready to run, reasonably priced.
Due around Christmas '84

Flying Zoo

P.O. Box 3 Suginami-minami Tokyo 168 Japan

Full Consist

New and used brass, books, kits, details—common and hard to find. LGB. Z. S. Sn3. And of course HO. HOn3. O. On3. Live Steam. Since 1951. Two locations.

THE ORIGINAL STOP TO Sacramento, CA 95821

In St. Louis

VISIT

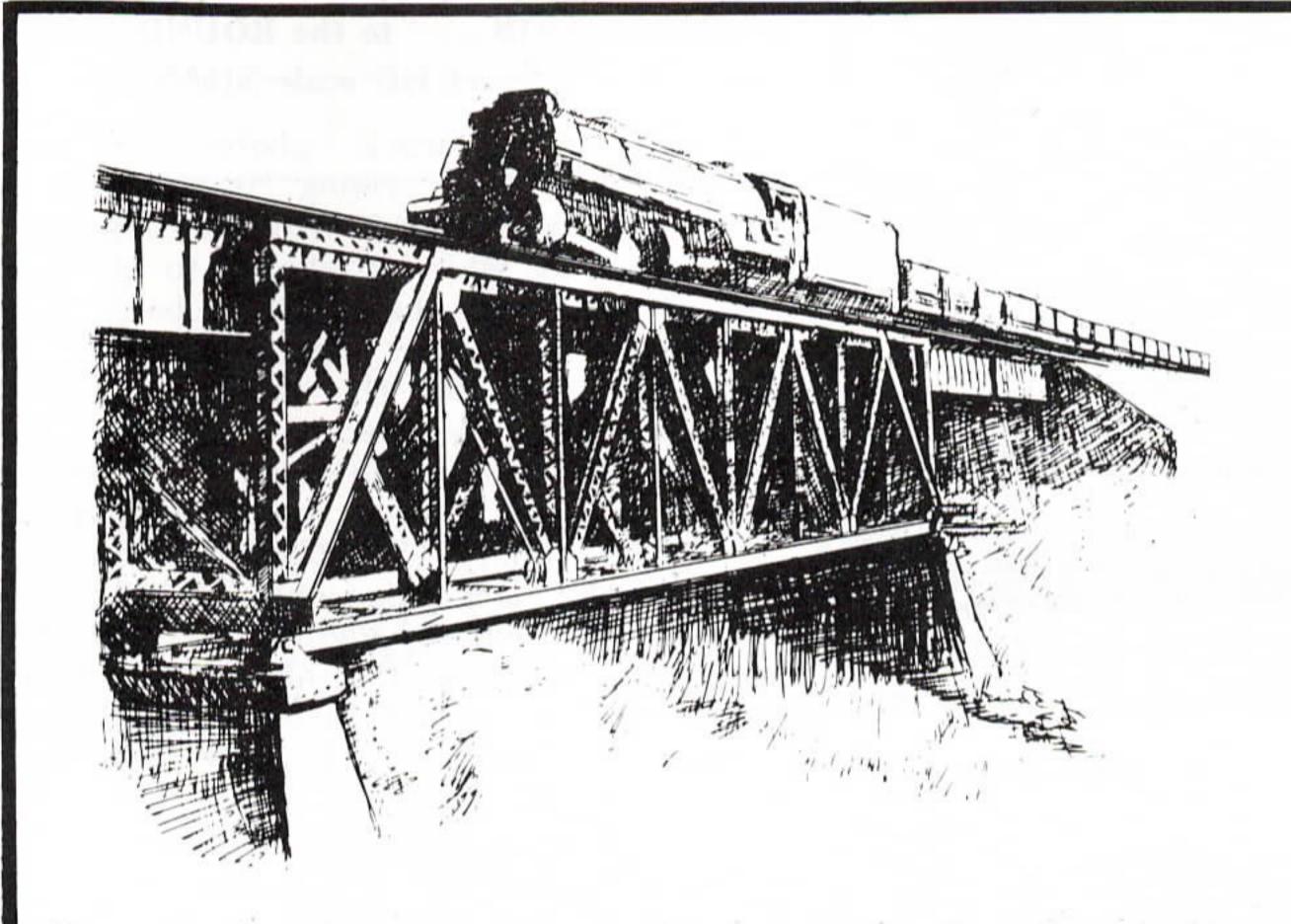
Tinker Town 9666 CLAYTON ROAD

(314) 991-0154

ROW GAUGE

BRASS STRUCTURES ROLLINGSTOCK Track items

RAILROAD BOOKS



(818) 796-7791

Mainline Modeler Magazine

(916) 485-5288

\$65.00

presenting details, techniques and photographs necessary for the lifelong enjoyment of model railroading

Subscribe! 12 issues a year, \$28 5115 Monticello Dr. Edmonds, WA 98020

"Red River"

Peninsula Hobbies

"SPECIALIZING IN CONSIGNMENT"

Central Valley	
HO Box Car, So. Pac. "Sunset Route"	\$15.00
HO Box Car, Arctic Oil Works	15.00
HO Side Door Caboose Red	16.50
HO Side Door Caboose Green	16.50
Mainline Model/Ye Old Huff'n P	uff
"O" 44' Exp. Ref. Flat Roof, Chicago,	***
Milw. & Pug. Sound	\$24.95
"O" 44' Exp. Ref. Flat Roof, Chicago,	24.95
Milw, St. Paul & Pac. "O" 44' Exp. Ref. Flat Roof, Wells Fargo	24.95
"O" 44' Exp. Ref. Flat Roof, Undec.	24.95
"O" 50' Exp. Ref. Flat Roof, GN	24.95
"O" 50' Exp. Ref. Flat Roof, Railway Exp.	24.95
"O" 50' Exp. Ref. Flat Roof, Western Fruit Ex	
"O" 50' Exp. Ref. Flat Roof, Undec.	24.95
"O" 50' Exp. Ref. Round Roof, REA	24.95
"O" 50' Exp. Ref. Round Roof, Milwaukee F	
"O" 50' Exp. Ref. Round Roof, Pennsylvan	
"O" 50' Exp. Ref. Round Roof, Missouri Pa	
"O" 50' Exp. Ref. Round Roof, H.P. Hood's N	24.95 24.95
"O" 50' Exp. Ref. Round Roof, PFE "O" 50' Exp. Ref. Round Roof, NP	24.95
"O" 50' Exp. Ref. Round Roof, GN	24.95
"O" 50' Exp. Ref. Round Roof, Undec.	24.95
"O" 50' Exp. Ref. Round Roof, III. Central	24.95
"O" 50' Exp. Ref. Round Roof, Borden's M	
"O" 50' Exp. Ref. Round Roof,	
Dairyman's League	24.95
"O" 50' Exp. Ref. Round Roof, Western Da	
"O" 50' Exp. Ref. Round Roof, Renken's Da	To the Party of the Control of the C
"O" 50' Exp. Ref. Round Roof, Canadian Pa	
"O" 50' Exp. Ref. Round Roof, Santa Fe	24.95
"O" 36' Flat Cars, GN (Two in One)	16.95
"O" 36' Flat Cars, Pennsy (Two in One) "O" 36' Flat Cars, SP (Two in One)	16.95 16.95
"O" 40' Ballast Car, SP	12.95
On3 32'4" Gondola, Basic Kit	11.95
On3 30' Gondola, Victor Gold M. Co.	12.95
HO, 50' Express Reefer, PFE	10.95

HO #135, Coal Dock HO #175, Rail Car Shed HO #180, Sand House HO #185, Feed Mill HO #25, Branchline Water Tower HO #65, Car Repair Shed HO #105, Pile Driver HO #125, Water Tank & Tool Shed HO #130, Ezra Cooper's Garage HO #135, 2-Stall Engine House HO #150, Freight House	60.00 90.00 90.00 60.00 80.00 125.00 90.00 80.00 100.00
Ambroid	*10.00
HO Pullman Std. Full-Door Box Car	\$10.00 10.00
HO Triple Decker Dormitory Car HO So. Railway "Big Boy" Tobacco	10.00
Hogshead Car	12.00
HO Open Platform Comb. Bag. Car & Coach	
HO 70' Pulpwood Car (Double Kit)	10.00
Gould Company	***
HO #4010, 120 Ton Ind. Brownhoist Crane HO #4012, 22' Wood Ore Cars (2 cars)	\$24.95 11.95
HO #4012, 22 Wood Ole Cars (2 Cars)	14.50
HO #4021, Flat Car	8.95
Books	
"Train Watcher's Guide to	
North American Railroads"	\$10.95
"Locomotives, Limiteds and Locals"	18.00 22.50
"From Horse Cars to Streamliners" "Acquaintance With Alco"	13.50
"SP Narrow Gauge"	32.50
"This Was Railroading"	9.95
"The Heisler Locomotive"	20.00
"A Locomotive Engineer's Album" "Commuter Railroads"	9.95 9.95
"Amtrak Trains and Travel"	15.95
"Rails West"	9.95
"Last of Steam"	20.00
"Lehigh Valley Railroad"	25.00

Fine Scale Miniatures

HO #155, Coal Dock

"Otto Perry Photographer" "Northwest Rail Pictorial" "Rayonier" "Rails North" "Brown Book" "Dawn of the Diesel" "Western Maryland Railway" "Tracks, Tires and Wires" "Rails to the Rockies" "Chicago Surface Lines" "The Whistles Blow No More" "Redwood Lumber Industry" "Vancouver Island Railways" "Ma and Pa" "Northern California Railroads" "St. Louis Car Company" "Steam, Steel and Limiteds" "Western Pacific Steam Locomotives" "Steam and Thunder in the Timber" "C&S Narrow Gauge" "Rails, Sagebrush and Pine" "Electric Way Across the Mountain" "Denver's Railroads" "Tehachapi" "Silver San Juan" "Narrow Gauge in the Rockies" "Colorado's Loneliest Railroads" "Saloons of the American West" "Nevada County Narrow Gauge" "Rails in the Shadow of Mt. Shasta" "Santa Fe's Raton Pass" "The Cripple Creek Road" "Rio Grande Glory Days" "Rio Grande Pictorial" "Crystal River Pictorial" "Crystal River Pictorial" "Crystal River Pictorial" "Crystal River Pictorial" "Crystal Roves by Rail" "Photo by McClure" "The Last Whistle" "Interurban Railways of the Bay Area" "Mineral Belt – Vol. I" "Mineral Belt – Vol. II" "Portrait of a Silver Lady"	30.00 25.95 19.05
--	---

1448 Cary Ave., San Mateo, California 94401

415/343-7779 (Located in the Shoreview Shopping Center at 3rd Ave. and So. Norfolk)

MasterCharge and VISA cards accepted.

	Store Hours	
M-F		11:00 - 6:00
Sat		10:00 - 5:00
Sun		12:00 - 4:00

California Residents add 6½% sales tax.

Please add 5% shipping on orders over \$30.00.

Please add \$1.50 shipping on orders under \$30.00.

All items subject to availability;

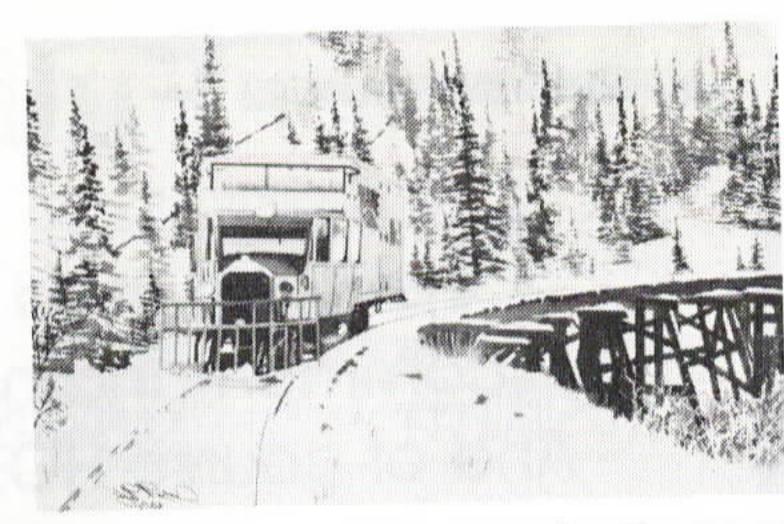
prices subject to change.

Goose 3/Trout Lake |Top| |Boreas Pass |Bottom| New Prints by Jan Rons

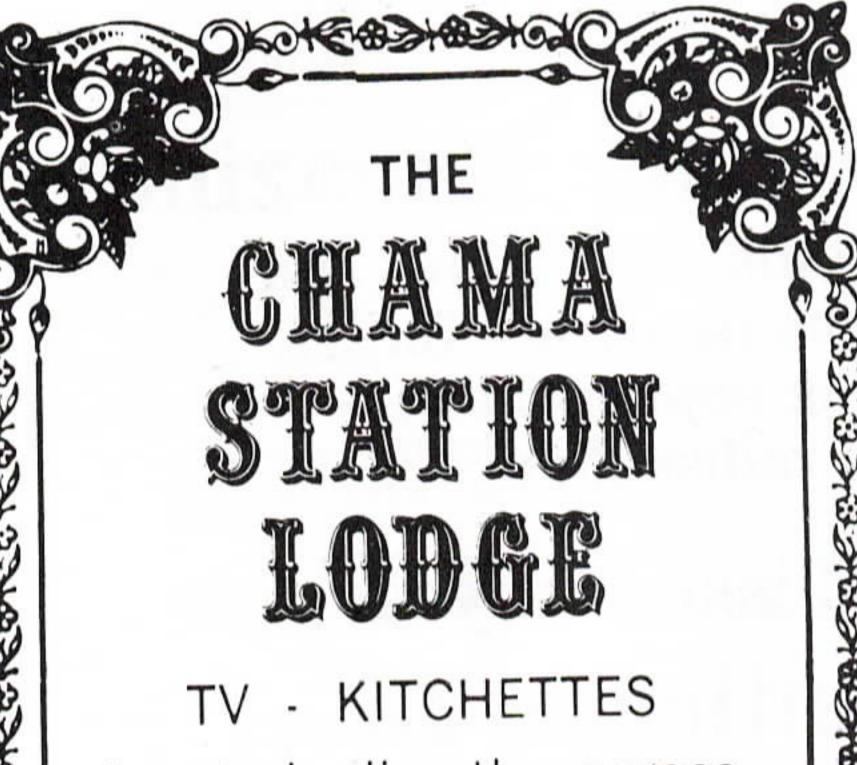
Same Size 16" x 24", Same Great Quality, Same Great Price!

Individual Prints \$45.00 Set of Two \$75.00 Limited Edition of 250 Images

Send Order to: Rons Art Graphics 5436 E. Cambridge, Phoenix, AZ 85008





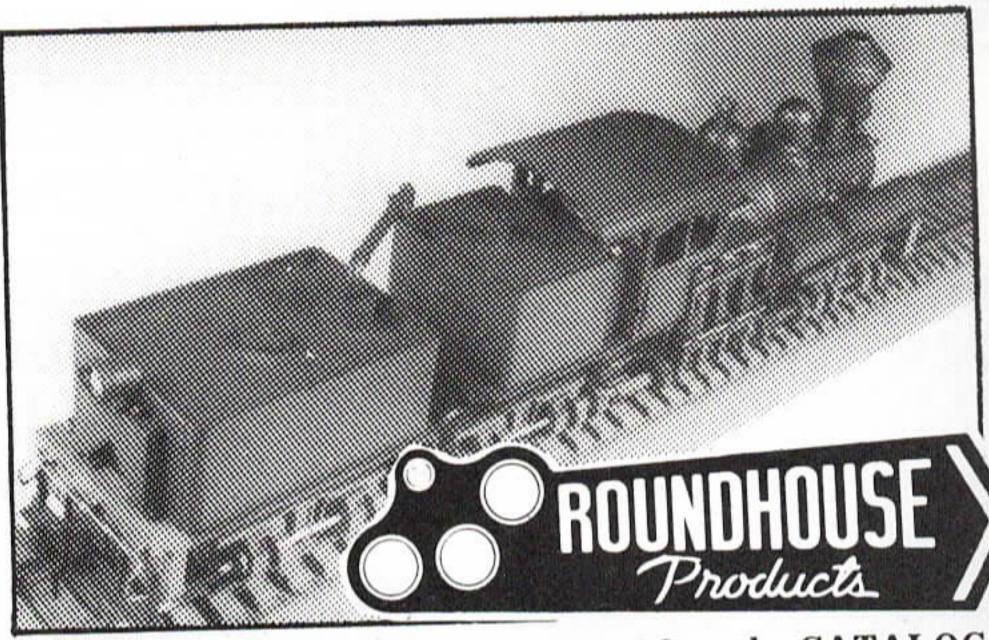


Shipping Begins Oct. 1st.

Located directly across from the Cumbres & Toltec Scenic Railroad. Special rooms available decorated in the style of the 1900's. Guaranteed

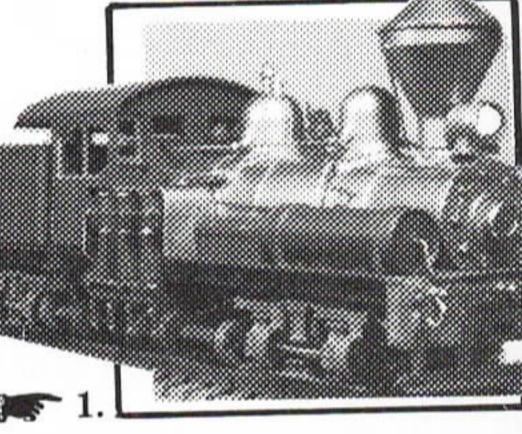
P. O. BOX 86 CHAMA, NEW MEXICO 87520 (505) 756-2315

clean and comfortable.



New ROUNDHOUSE PRODUCTS HO scale CATALOG ... the Railroad Catalog that makes Dreams come True!

New 1984 ROUNDHOUSE HO Catalog



to the ROUNDHOUSE INTRODUCTION ... Brand New 3-Truck HO scale SHAY kit!

About the 3-truck photo coverage. Modelers have been asking "is the new 3truck Shay really new?" Answer, Just look at the actual Shay kit photos to the left and see what new changes have been made to produce our new Lima Class "C" 3truck Shay. Photo (1) top, front view illustrates our new "electric" headlight and new molded steel cab front. Photo (2) Shay rear view, showing the new sand box and tender. Photo (3) illustrates the new water siphon and side view of the third truck water tender. Photo (4) Shay fire box detail showing the new steam brake and oil heater, with control rod and steam line (made from wire) and the new twin single-phase air pumps!

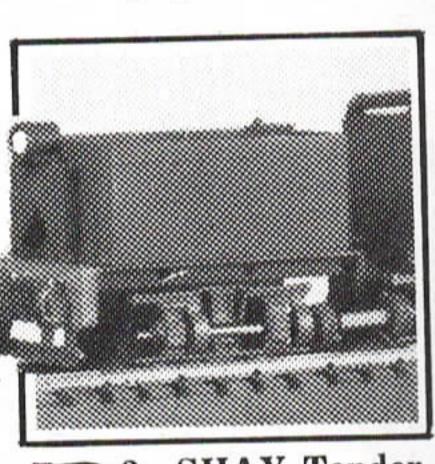
New Shay? You bet! Even the underframe has been shortened, along with new fuel bunker! For the complete picture, just look at the top photo of our terrific new 3-trucker; notice the steel (molded) cab featuring arched window, plus the new water tender! You be the judge... is it really new? We say it is... See it at your

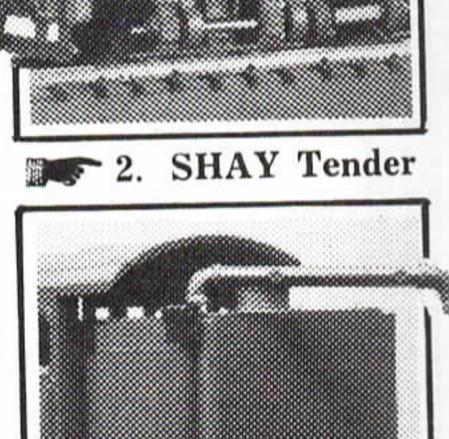
Roundhouse Retailer today!

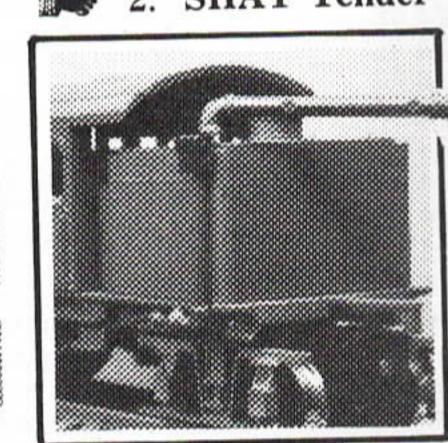
the Railroad Book that makes Modeler's Dreams come True!

New Roundhouse Products 1984 Catalog spans over 100 years of Model Railroad products, 1880-1984

112 Pages 60 Locomotives 650 Car Kits... All for \$5.00 copy







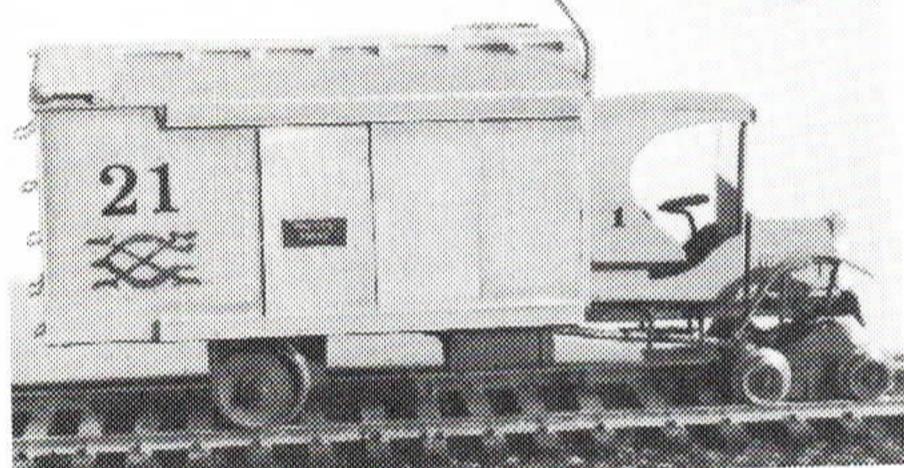
Flash... New 1984 Roundhouse Products HO Scale Catalog, just in from the printer! Big, 112 pages, 8½x11", packed full of Shays, rod locomotives, 650 "hiiron" freight and passenger car kits, plus the 3in1 freight car & building line kits! Plus...accessories and tender kits... all this and much more in our brand new 1984 HO Scale Roundhouse Catalog. Available from your Roundhouse Products retailer; \$5.00/copy.

Flash... Roundhouse Book Department. New Shay book covering the Lima Class "C" 3-truck. Coinciding with our release of the 3-truck Shay model kit, Roundhouse is proud to announce the 3-truck Shay book!... If you thought the 2-truck Shay book was something, then wait till you see the 3-truck Shay book! Featuring some of the finest 3-truck Shay photos ever published, from petite little 60 tonners to the giant 150 tonners; Pacific Coast Shay under construction, Western Maryland No. 6, plus "Cass" by Benjamin Kline and George Kadelak, with updates by Bob Walker... If you're into Shays, then the 3truck Shay book is your next Shay Modeler's Handbook! Price to be announced. Book Dept. Expanded ...

Roundhouse Products Book Department: #1845 Shay, Class "B" 2-truck \$10.50 ea #1843 Shay, Class "C" 3-truck \$ TBA #1844 Shay, 1925 Catalog Reprint \$5.50 ea #1890 Roundhouse 1984 Catalog \$7.50 ea

The Roundhouse Book series is available through our retailers. Please include \$1.50/title for postage & handling when ordering direct. Thank you...

1915 MODEL "T" RAILTRUCK



or HOn3

Kit:

\$17.50

R.T.R.:

\$36.95

Send 50 cents for spec sheet

& colored photo

DISTINCTIVE SCALE MODELS

PO Box 6476 Lincoln, NE 68506

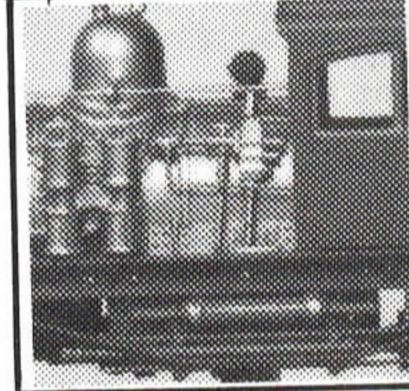
Trade:

Shay 3 cylinder "ENGINE"



just published... ROUNDHOUSE PRODUCTS 1984 Catalog MDC DEAL 620

Model Die Casting, Inc. 3811-15 W. Rosecrans Blvd. P.O. Box 926 Hawthorne, CA

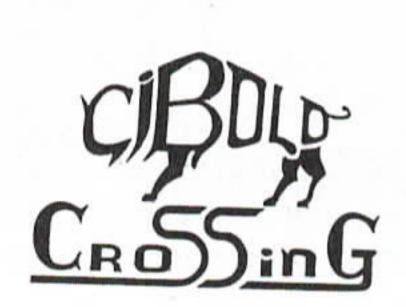


3. Water Siphon

4. Steam Brake Oil Heater Control Linkage

90250

HOSCALE KCC-1



P.O. BOX 2640 UNIVERSAL CITY, TX 78148-1640

SALIDA COAL CO

CAST DENTAL PLASTER WALLS MATE AT 45°, DOORS CAST IN BASSWOOD DORMER & SASH

VINTAGE REPRODUCTIONS DRY TRANSFERS

\$28.50

\$2.00 SHIPPING

TX. RES. ADD 5% TAX

3.75" x 9.25"

GAUGE ONE AMERICA

P.O. Box 235 Danville, PA 17821



(717) 784-2755

AVAILABLE

Importer/Distributor For Quality Gauge One Locomotives, Rolling Stock & Accessories

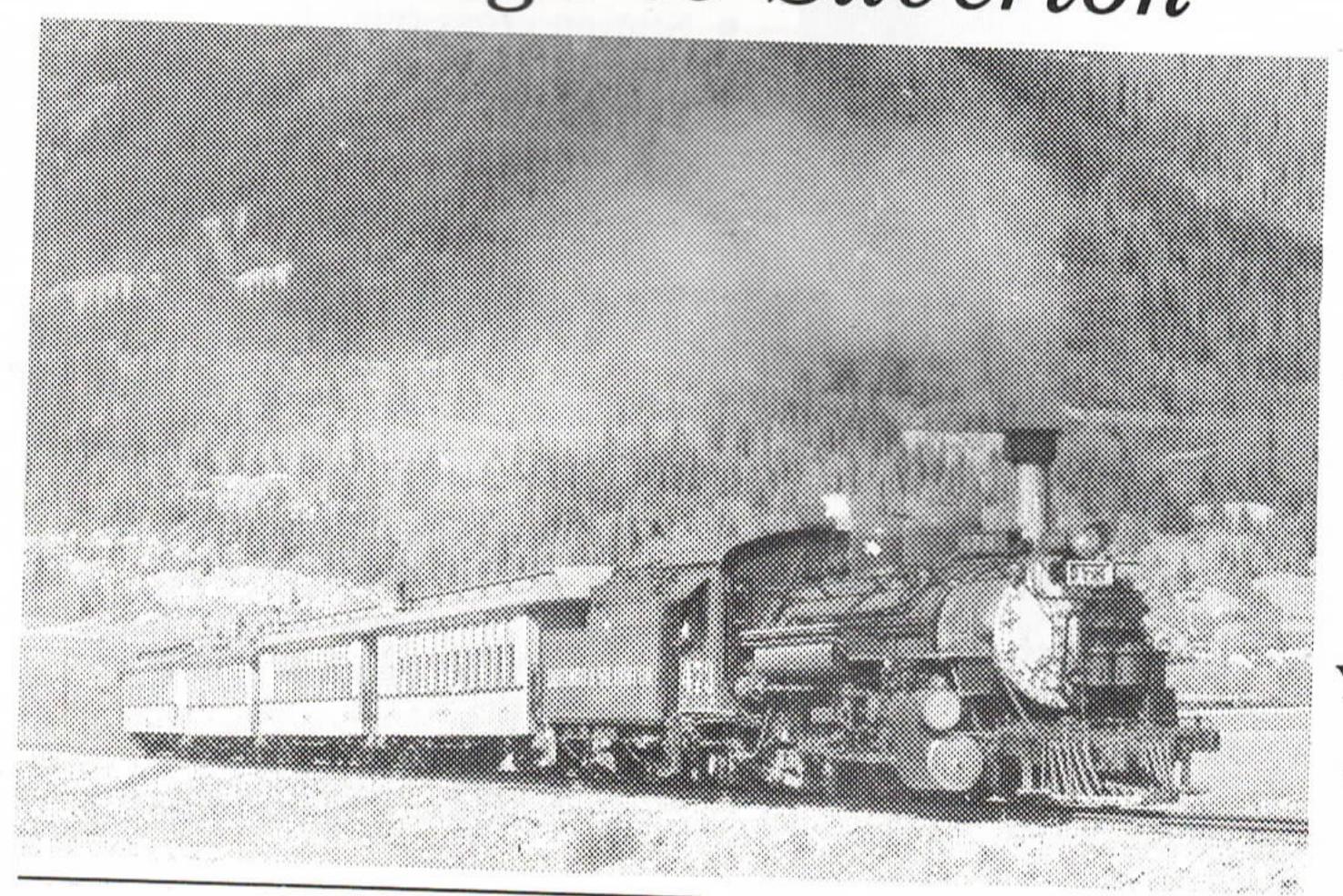
PENNSY K4

- 1:32 Scale Gauge 1
- Electric Version Built
- Live Steam Version Kit or Built (Kit Completely Painted and Machined)
- All Metal Construction



PRODUCT CATALOGS \$15.00 • DEALER OPPORTUNITIES AVAILABLE

Ride the Narrow Gauge SILVERTON TRAIN Durango to Silverton



Stay at the historic Grand Imperial Hotel Silverton, Colorado



1882

ROUND TRIP LAYOVER IN SILVERTON

You may purchase a round trip ticket in Durango to Silverton and lay over in Silverton as many nights as you would like. The best place to stay is the Grand Imperial Hotel. Write or call for brochures: P.O. Box 97, Silverton, Colorado 81433 303-387-5527

HOn3

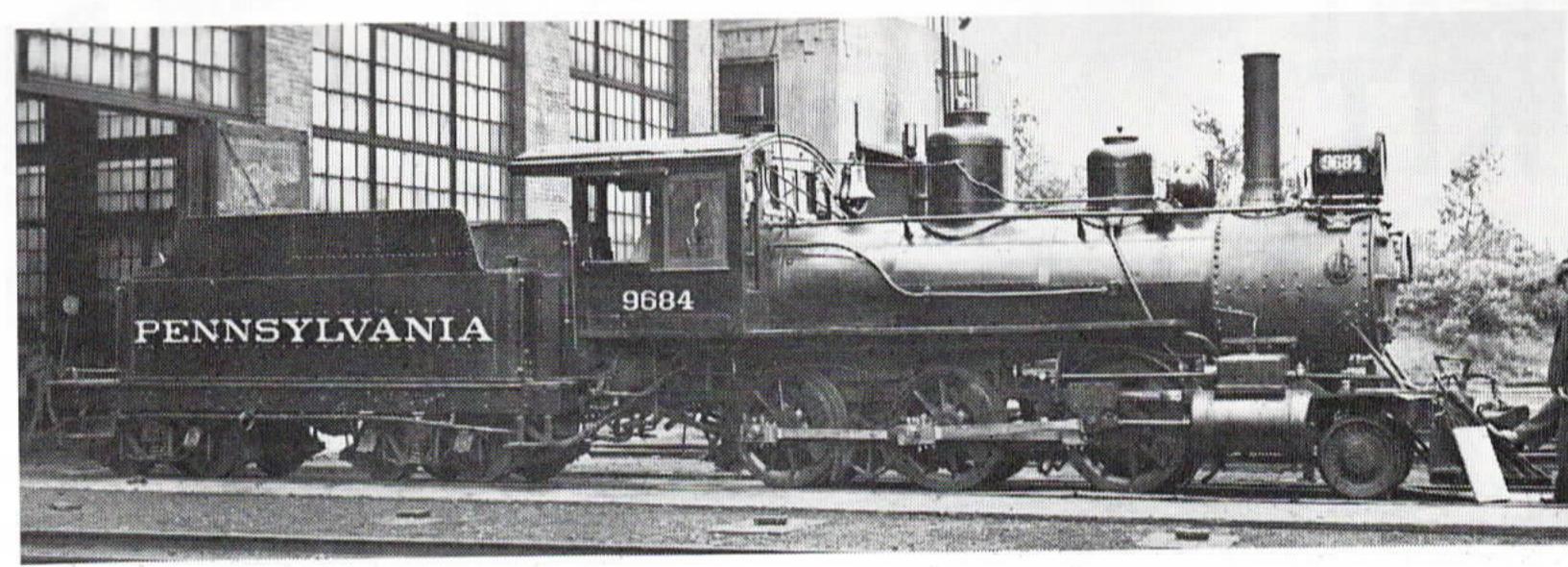
PENNSYLVANIA (W. & W. R. R.)

2-6-0 No. 4

Complete Train with
Nos. 2 to 13 Coaches
& Freight Cars
Coming Shortly



77 West Nicholal Street, Hicksville, N.Y. 11801



Narrow Gauge

Street _

\$2 ON NEWSSTANDS

EU WEST WITH PACIFIC NEWS.

We'll show you the whole Western rail scene every two months . . . Trains and Transit . . . mainline . . . shortline . . . tourist . . . preservation . . . photos (many in color) . . . features, and authoritative columns on each of the West's major railroads and light rail operations.

Now a part of the Interurban Press family, the new PACIFIC NEWS is going places. You'll want to be aboard!

205

□ \$20/12 issues □ \$37/24 issues (CANADA/FOREIGN ADD \$4)

Name _____

City _____

State____Zip____

CLIP, MAIL TODAY

.205

PACIFIC NEWS • PO Box 6128 • Glendale CA 91205

TAKE COMMAND— MDYNATROL ®

Up To 18 Locomotives Simultaneously & Independently

SIMPLE TO USE TO ENJOY TO WIRE MORE LOCOS

MORE LOCOS TRAINS FUN

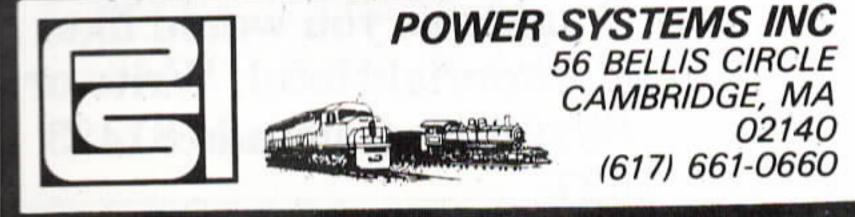


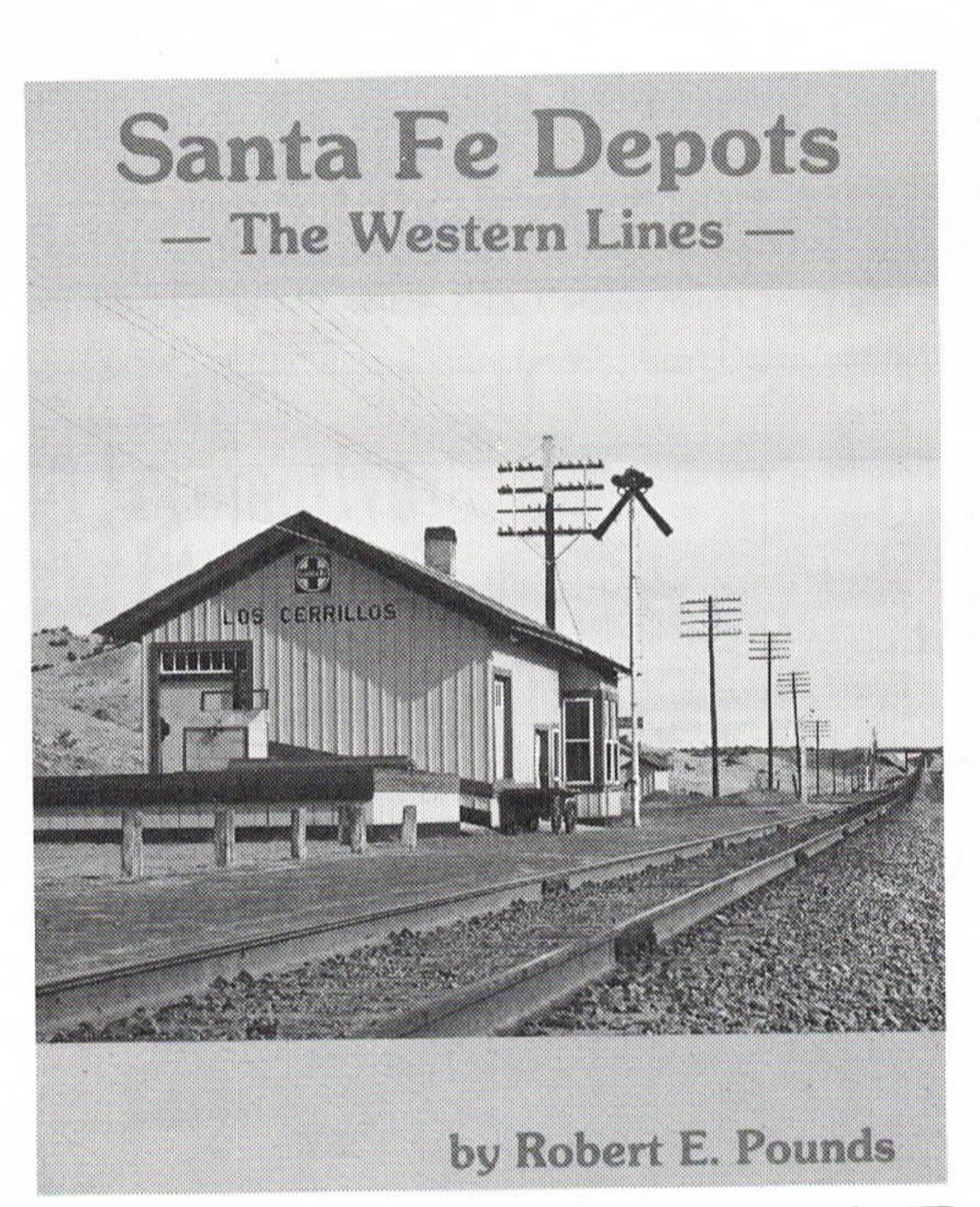
FEATURES

- * 18 Engineers can control 18 locos with 2 wires
- * Receivers small enough for HON3 & N Scale
- * Receivers POWERFUL enough for "O;"
- * All CABs are walk-arounds—plug into one common line
- * Any CAB controls any channel; plug
- ★ Full Function Momentum or Direct Control
- * Familiar throttle control
- ★ MU-2 & MU-3 capability—lash ups can face any
- * 14 VDC on track (17VDC for "Lionel"), Loco
- ★ System expandable to over 50 amps
- * High Speed Electronic Circuit Breaker (ECB)
- resettable from any CAB
 ★ Constant lighting built in
- * Track stays cleaner longer/Glitch free
- * Low TVI/Electronic Noise Pollution
- ★ DM2 Memory System
 ★ Operation by Carrier Control
- ★ Non-Obsolescence
 ★ Coming Soon—Realistic Sound

Take Control With Dynatrol

send stamped self-addressed envelope for information.





- Written by a Santa Fe Railway Division Superintendent of Police.
- 240 pages.
- 450 photographs (many rare and heretofore unpublished!).
- 4 pages of full color
- Hard bound.
- $8\frac{1}{2}$ x 11.
- Thorough text and cutlines.
- Chronological evolution data.
- Station cross-reference.
- A fine addition of the highest quality to any library.

SANTA FE DEPOTS

-The Western Lines -

Is an exhaustive study of the depots of the Santa Fe Railway's Western Lines division. All Santa Fe depots in Colorado, western Kansas, western Oklahoma, western Texas (including the Orient) and New Mexico (except the A & P depots west of Albuquerque) are included.

Each major line and contiguous branch are discussed in general and are detailed in their own tables — station by station and depot by depot — with the official data on each depot. Now available at \$49.95 through your favorite hobby shop or bookseller, or

Kachina Press • 1025 Elm Street • Dallas, Texas 75202-3112

We pay surface postage on retail orders, worldwide.

Rick's Grande

narrow gauge car shop

NARROW GAUGE BRASS HOn3

	KIT	R.T.R. BRASS	CUSTOM	
Precision Scale Co.				
D&RGW 6500 Bulkhead Flat	\$ 27.		\$ 45.	
D&RGW K-28 2-8-2	\$270.	\$395.	\$445.	
D&RG K-27 #453 2-8-2	•	\$395.	\$445.	
D&RGW/RGS K-27 #461 2-8-2		\$395.	\$445.	
R.G.S. K-27 #455 2-8-2		\$395.	\$445.	
WSLCo. #15 3T Shay		\$395.	\$445.	
WSLCo. #12 3T Shay		\$460.	\$510.	
WSLCo. #14 3T Shay		\$465.	\$515.	
WSLCo. Side Dump Work Car (3	to a box)	\$ 60.	\$ 90.	
WSLCo. #10 3T Shay		\$395.	\$445.	
Baldwin 0-4-2T			(Factory Ptd.) \$ 75.	
Class A 2T Shay		\$265.	\$315.	
Conoco Tank Cars		\$ 55.	\$ 70.	
Texaco Tank Cars		\$ 58.	N.A.	
Soho		We seed		
C&S Coach #70		\$ 65.	w/Interior \$100.	
D&RGW Coach #319		Ptd. \$ 70.	w/Interior \$100.	
D&RGW Combine #202		Ptd. \$ 70.	w/Interior \$100.	
United	w			
5 Car D&RGW Passenger Car Se			\$300.	
COWICHAN 2T Shay Latest Run		\$285.	\$335.	
Lambert				
RGS Goose #5 Pierce Arrow			(Factory Ptd.) \$195.	
D	On3			
Precision Scale Co.		\$70 5	*070	
D&RGW C-19 #345 2-8-0		\$795 .	\$870.	
D&RGW Hi Side Gon Plow		\$155.	\$180.	
D&RGW 44' Baggage Car		\$170.	\$195.	
D&RGW B-1 Business Car		\$170.	\$195.	
			The state of the s	

Your choice of Road Number and Style of Lettering on Custom Painted Brass. \$2.00 Postage & Handling. N. Y. S. Residents: Please add appropriate Sales Tax. Call or Write on Amount of Time for Custom Painted Orders.

— P.O. Box 17333 • Rochester, N. Y. 14617 • Phone: (716) 359-1048 —

GARY NASH

PROFESSIONAL MODEL MAKING

- DIORAMAS
- VEHICLES
- KITS
- FILM & TELEVISION
- DOLL HOUSE, ETC.
- PILOT MODELS
- MUSEUM AND HISTORICAL DISPLAYS
- MILITARY
- SCRATCHBUILDING
- WEATHERING

Since there is such an overwhelming variety of scales and models available to the hobbyist it is impossible to have any type of price guide prepared for the consumer. Write, or better yet, call me and we will discuss your personal needs.

P.O. Box 1310 PACIFICA, CA 94044 415/355-4546

In Australia it's the

NARROW GAUGE MODEL SHOP

for all

Scratchbuilders supplies and Craftsman Kits in

> H0n3 H0n30 0n3 On30 On2 1:22.5

27 Mills Street, Middle Park 3206 Victoria, Australia



MICRO ENGINEERING

has moved!

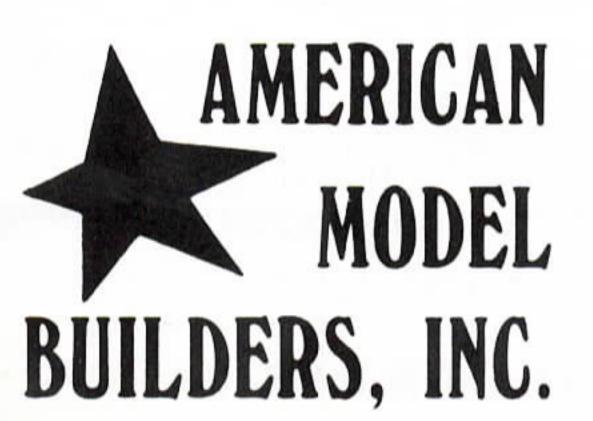
1120 Eagle Rd. Fenton, MO 63026

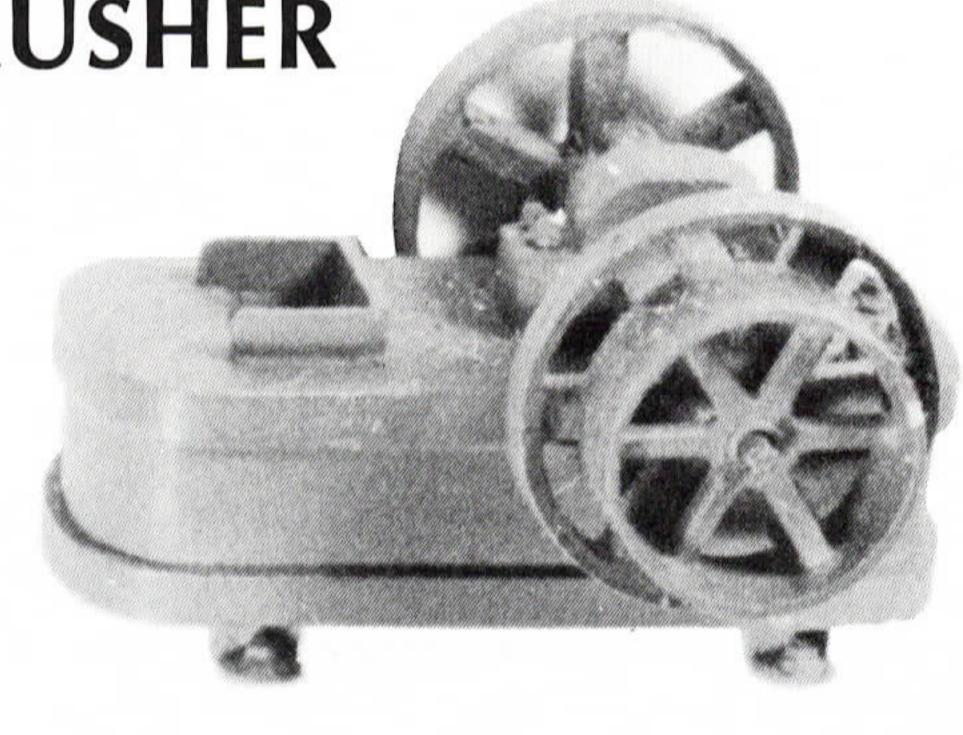
Send \$1.00 for catalogue sheets containing information on all our HOn3 and ON3 kits and parts.

ANNOUNCING ... THE CRUSHER

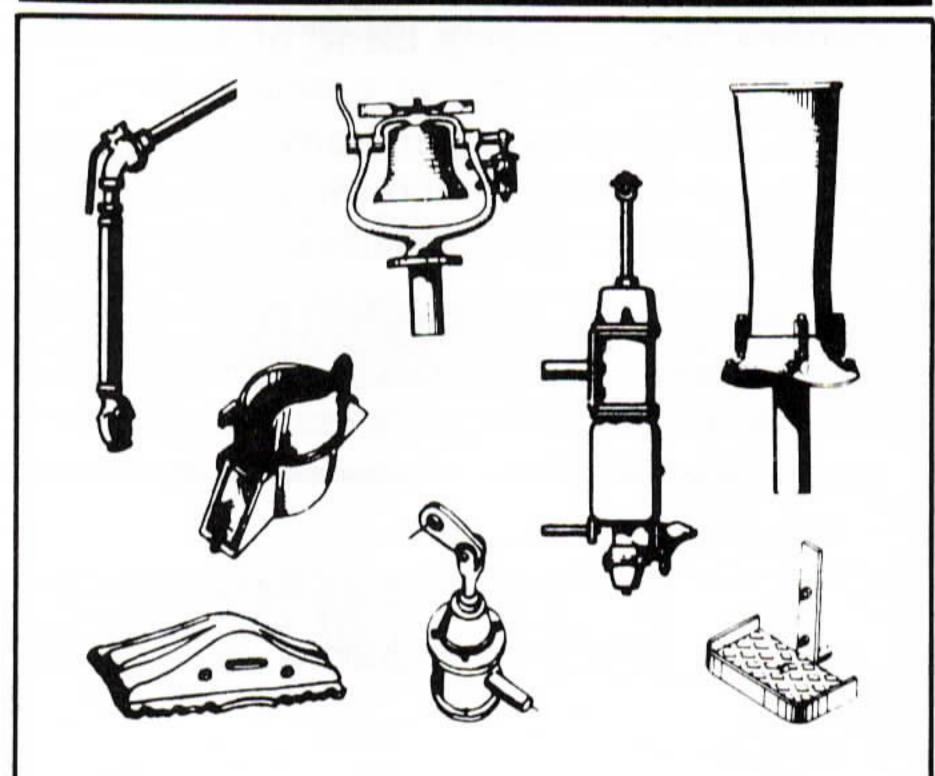
THE FIRST IN A SERIES OF HO SCALE STAMP MILL MACHINERY KITS.

FOR INFORMATION SEND A SELF-ADDRESSED ENVELOPE AND TWO 20¢ STAMPS TO:

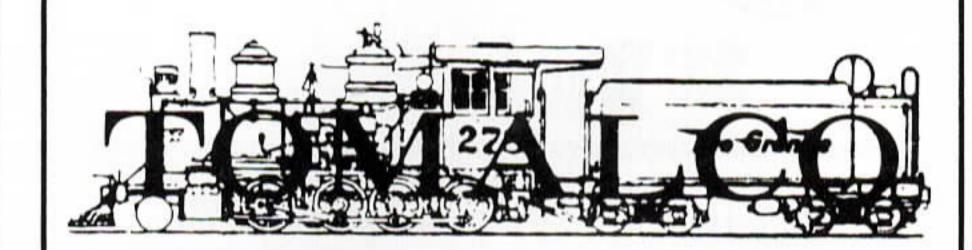




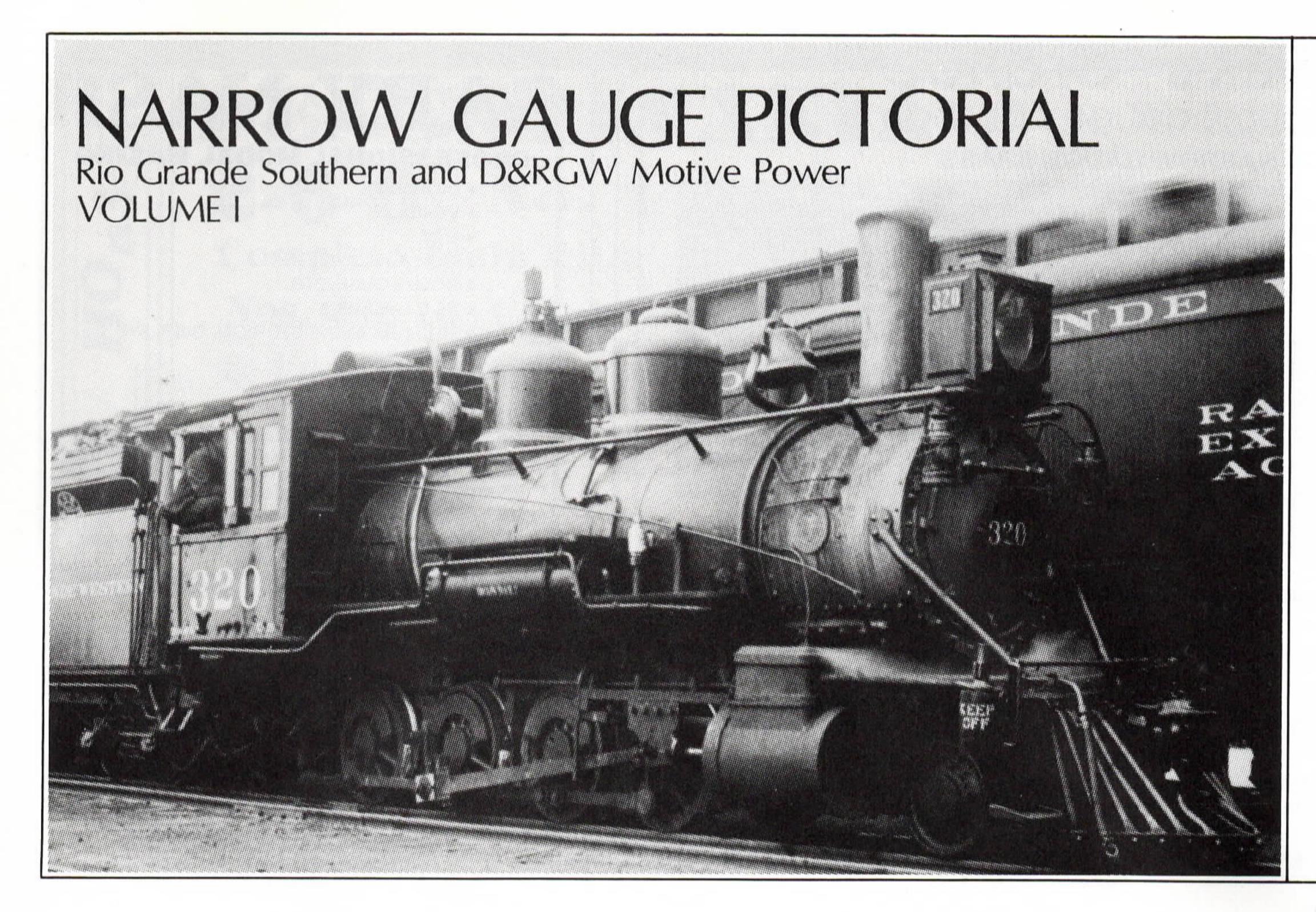
2500 SUTTON AVENUE, ST. LOUIS, MO 63143



For your kit-bashing and/or scratch-building in S and Sn3, look over Tomalco's line of precision car & loco castings and pipe fittings. Every last detail of the prototype parts are duplicated to scale in brass for your modeling pleasure. Send SSAE for catalog (2 stamps, please).



Box 158 • McCracken, Kansas 67556



NOW AVAILABLE SOFTBOUND

Volume 1 ... \$17.50 Volume 2 . . . \$18.50 Volume 3 ... \$20.00 Dealer or Direct



CUSTOM BOUND LIMITED EDITION

Numbered and Autographed \$30.00 Direct Only

Cal. Residents add 6% Sales Tax

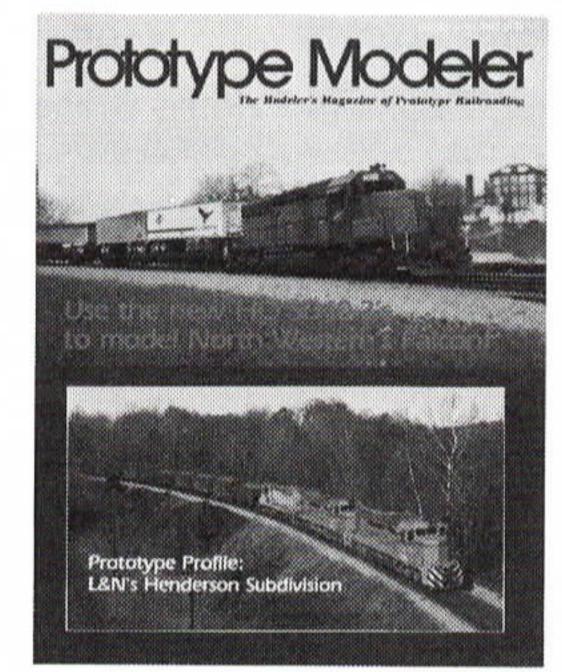
R/ROBB LTD.

P.O. Box 1891 Oakland, CA 94604

WHAT IS...

Prototype Modeler?

Quite simply the only magazine of its kind. PM features the fascinating blend of model railroading and the real thing. We've got articles on prototype trains, railroads and operations, track plans, construction projects and more. It's the kind of material the serious modeler can't do without.



米

THE MODELER'S MAGAZINE OF PROTOTYPE RAILROADING

One year (six issues) is only \$12.

Sign me up for one year of PM. Name . **Address** Prototype Modeler My check or money P.O. Box 397 order is enclosed. Park Forest, III. 60466

RUSS SIMPSON ... 2.210 400 TOOLS . 375 . 500 -1.00 over 70 castings = -. 800basic interior MACHINIST'S PARALLEL SQUARE CLAMP 10.00 10.00 Shown 1/2 Size

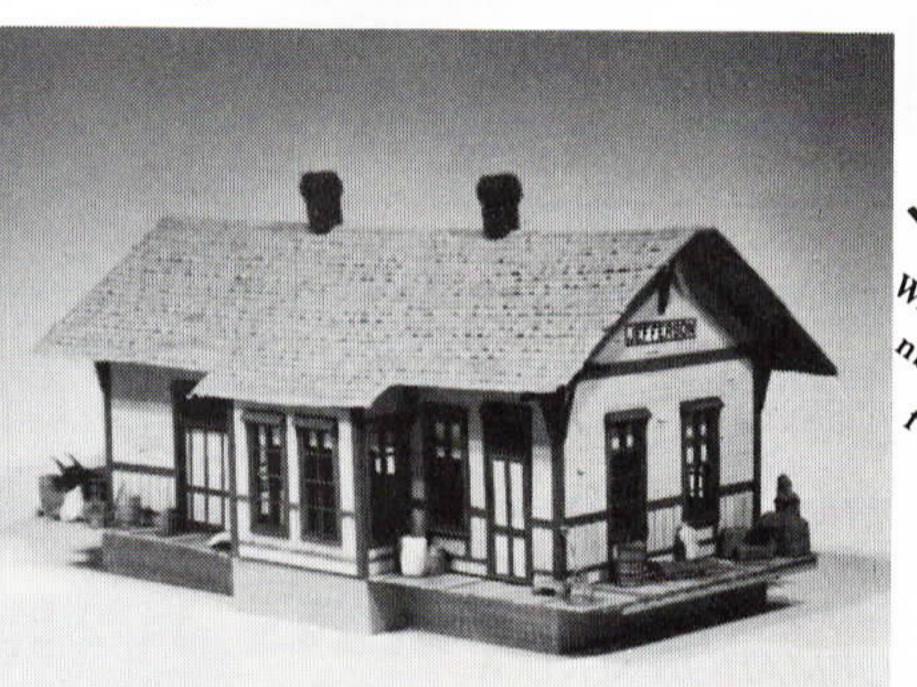
T-SQUARE 1.49

ALL 3 SIMPSON TOOLS

38' Wooden Water Car 838

SPECIAL at \$19.50

Builders In Scale Fine Craft Kits



WATER TANK nbw's, 40 cst'8s Frost box 834.95

Another GREAT HO kit for C&S, DSP&P fans !! Just shipped: JEFFERSON STATION & WATER TANK

SPECIAL: BOTH KITS

POSTPAID \$69.95

All mail orders over \$60. sent prepaid in the USA & Canada. Under \$60. add \$2.50 Shipping & handling. We honor Visa, Mastercard please include expiration date.



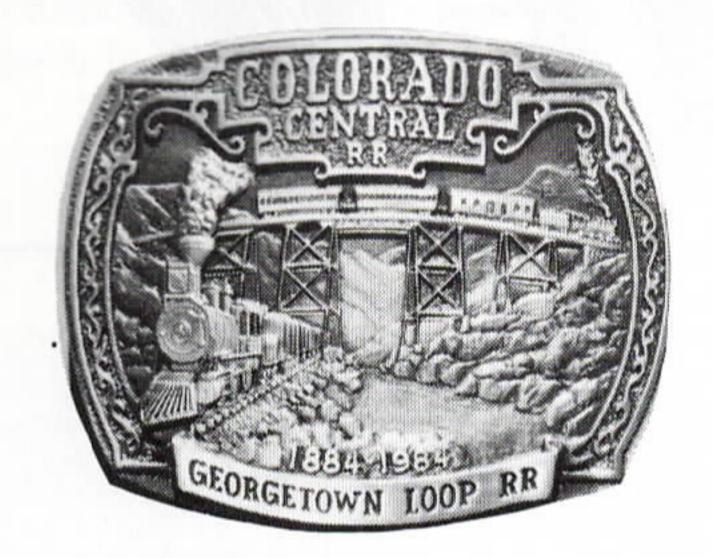
. 375_

HO std.ga.

TRAINMASTER OF

3700 N. Havana, Suite 214 Denver CO 80239 (303) 371-8444

GEORGETOWN LOOP CENTENNIAL BUCKLE



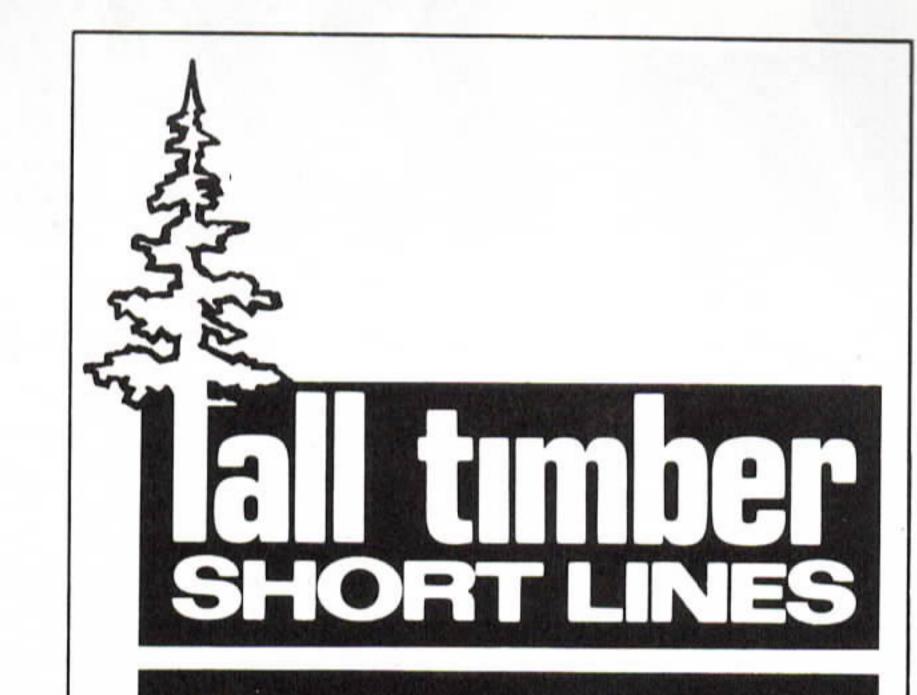
Collector's Edition of 750

Celebrate the centennial of the Devil's Gate Viaduct first used in 1884 and the new Viaduct first used in 1984 by the Georgetown Loop RR with this unique serial numbered buckle.

Solid Bronze - \$19.00 Silvertone Plated - \$35.00 Solid Sterling Silver - call for price



2701 N. Seventh Ave., #A Phoenix, Arizona 85007 (602) 263-9759



Phe fascinating world of Pacific Northwest logging equipment, camps and operation: scale drawings, photos & histories. 1-year subscription only \$12 (6 issues), 2 years \$23, 1st Class U.S. & Canada. WMS-II Marketing, Dept. Gaz, 4928 N. Frace St., Tacoma, WA 98407.

PRESENTS

"The Art of Soldering as Applied to Model Railroading"

See and learn:

(88 minutes)

- How and why solder works
- How and why fluxes work
- How and why soldering irons work
- How and why torches work
- How and why resistance tools work

Learn both the **theory** and **practical application** of these and more soldering tools and techniques.

Get your copy today – only \$59.95 (VHS or BETA) postpaid from



P.B.L Box 749 Chama, NM 87520 Or call: 505/756-2419



CAST MASONRY...

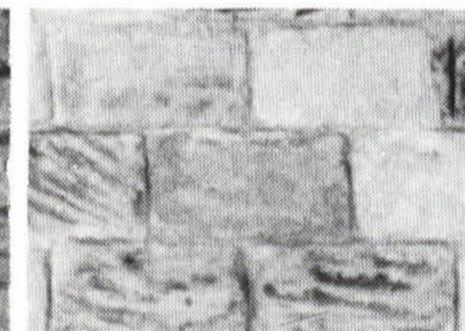
For super detail. Many uses Cast in Hydrocal plaster

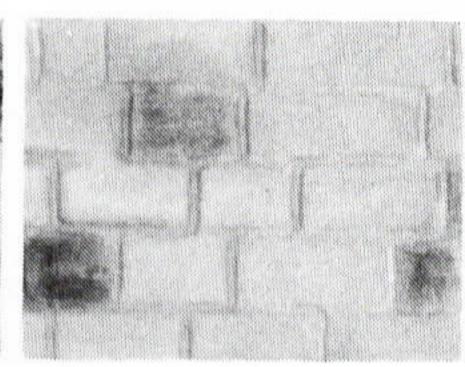


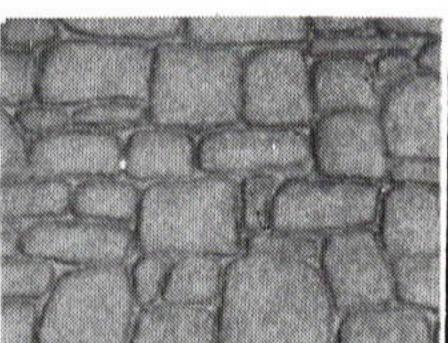












502/552

503/553

502-507 Strips 1 X 7 [ap] 4-6/pk, \$4.00

552-557 "Sheets "5x 7" [ap] " 1 / pk. \$3.00

1984 CATALOG ADD \$2.00 Shipping with order.

Photos are full-size. 1/4" Thick

504/554

505/555 ~SAMPLER PK.~ 1ea~502,503,

504,506,507 no. 510 - \$3.50

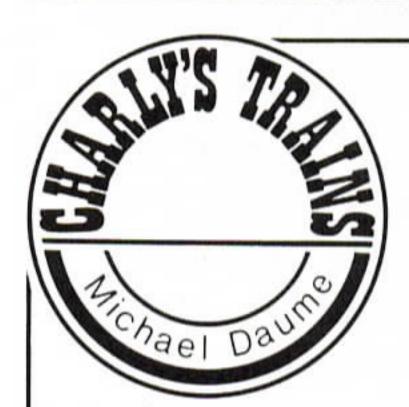
506/556

507/557



HIM PRODUCTS

6020 Jessamine 206, Houston, TX. 77081



LOWEST PRICES - RELIABLE SERVICE

We carry all European Prototype models and Rivarossi products



LGB		LGB				Rivar	ossi/AHM l	OH
2017D	US - steam	\$142	3061	brown coach	\$40	4-8-8-2	Cab Forward	\$138
2040	crocodile	250	3070	DB coach	62	4-8-8-4	Big Boy	155
2051	diesel loco	235	3071	DB coach	62	4-6-6-4	Challenger bl.	150
2051S	diesel/sound	425	3080	US coach	48	4-6-6-4	Challenger gr.	155
2065	railcar	250	3081	US coach	48	4-8-4	FEF UP black	125
2080D	2-6-2	165	4061	gondola	22	4-8-4	FEF UP grey	125
2080S	2-6-2/sound	425	4065	caboose	29	2-10-2	S1a B&O	125
2085D	mallet	350	4067	box car	31	2-8-8-2	Y-6b N&W	122
2095	B'B' electric	165	4068	stock car	31	2-8-4	Berkshire	114
2096S	electric/sound	425	4070	reefer car	34		GG-1 electric	71

All prices include shipping to the USA, but may change *slightly*. Please send \$2 for complete information, our second hand train list, and monthly newsletter. For all inquiries write to:

CHARLY'S TRAINS

Bogenstr. 11 2000 Hamburg 13 W. Germany Tel. 040-453078

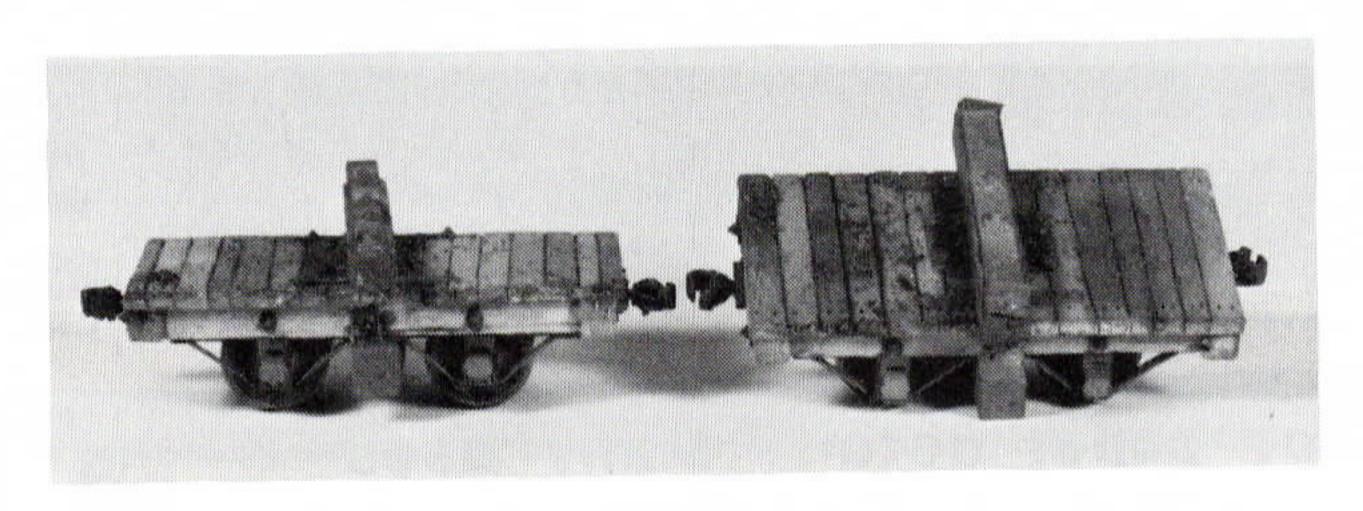
We will answer your letters!

Depressed Center Flat Car for LGB All metal, will run on any radius, \$335 ppd.

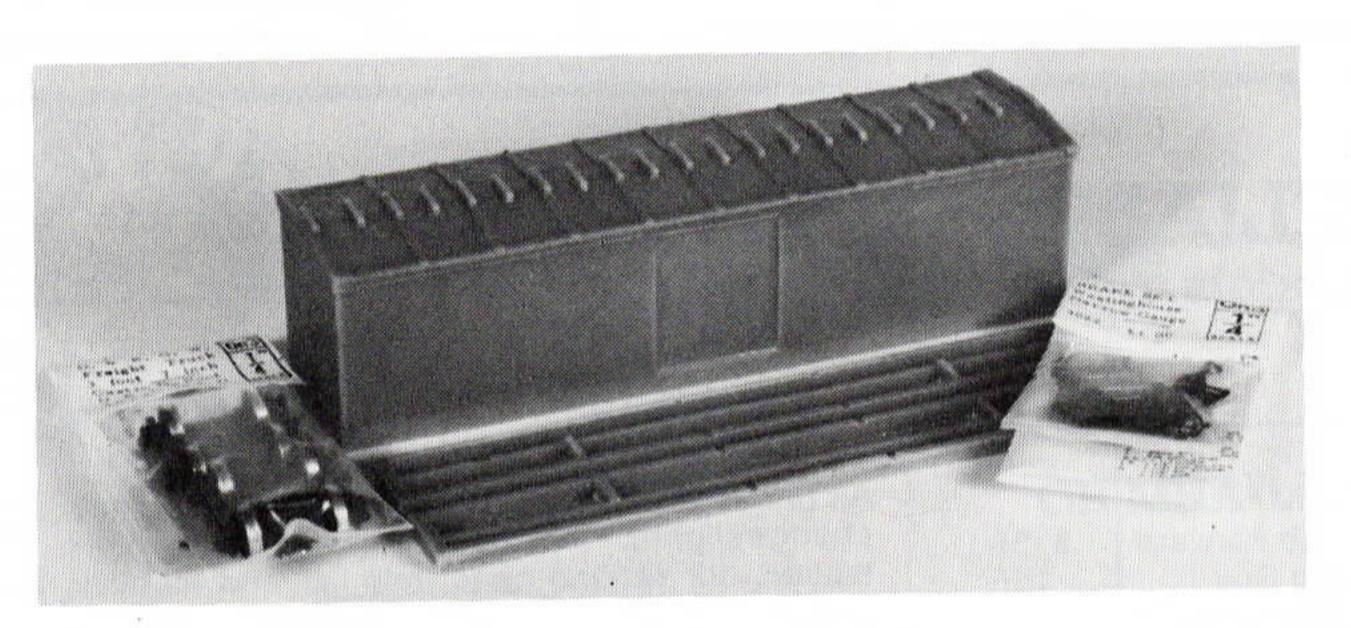


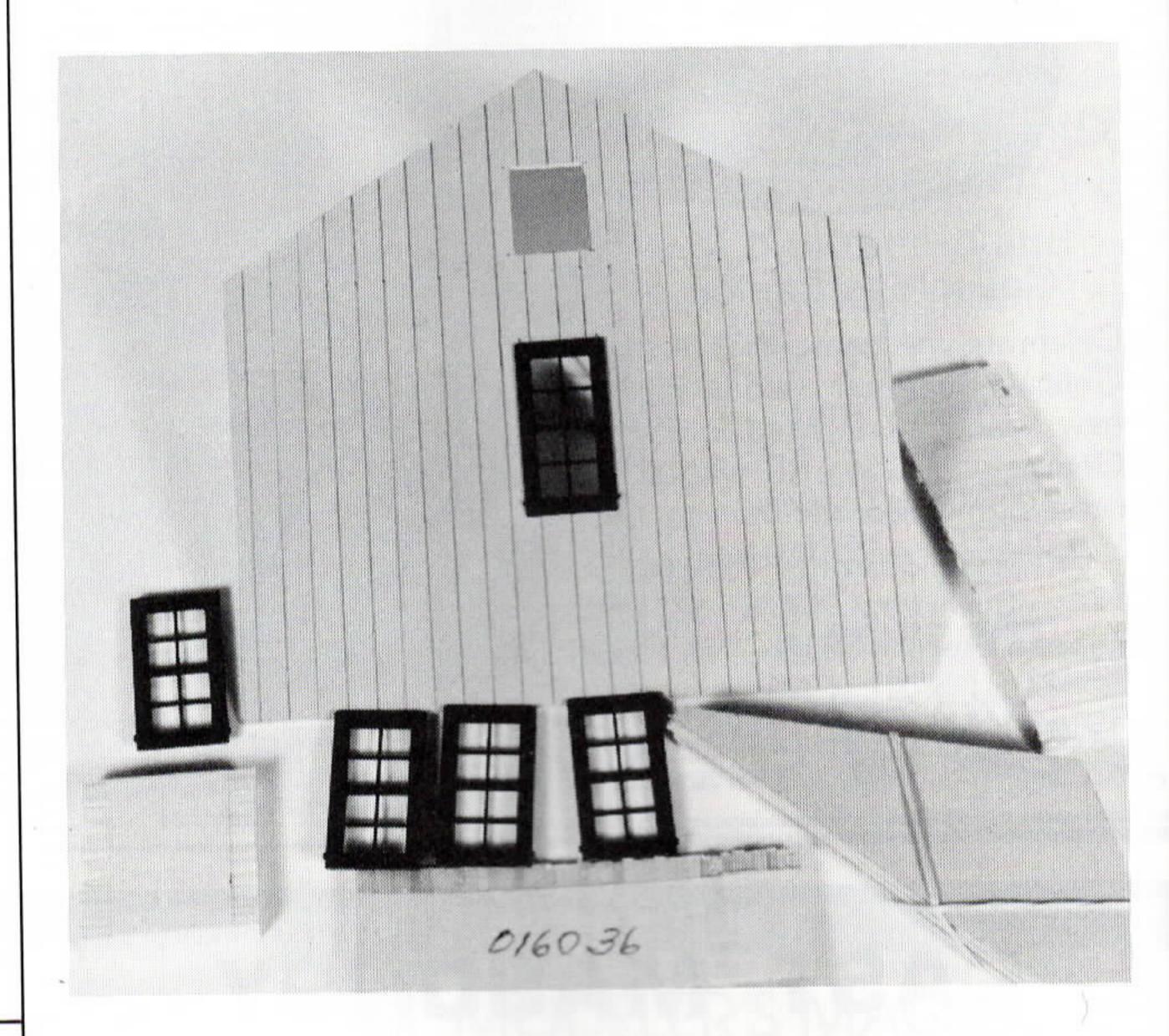
NEW in REVIEW

Calaveras Model Works, P.O. Box 4988, Salinas, CA 93912 has its new On3 Willamette disconnected trucks available. These little trucks were described by Bob Stephens in the May/June 1984 GAZETTE. The kit is made up of precut Borneo balsa wood. All of the correct nut-bolt-washer castings are provided as are Simpson pedestals. Grandt Line wheels are used. These kits make up into very reliable little cars in about three hours. Each pair of trucks sells for \$21.00. They come with full instructions and the same plans that were presented in the GAZETTE article. I hope Calaveras keeps on bringing out this type of kit. Bob Brown.

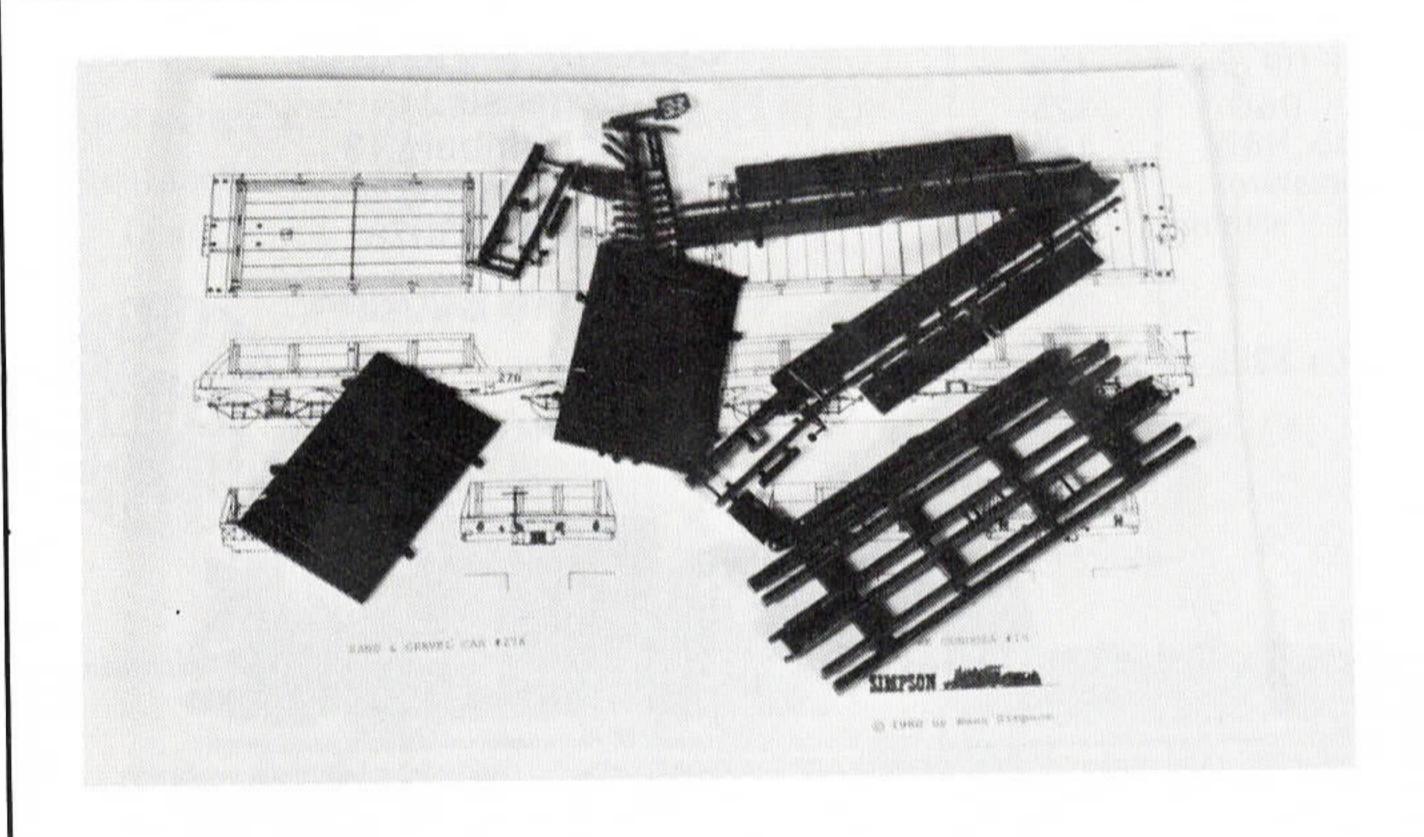


Star Models, Rt. 1, Box 136, Hawkins-Cummings Rd., Paris, KY 40361 has a new On3 3000 series box car available. The kit consists of a one-piece casting which includes the sides, ends, roof, and roof walk supports. You add a one-piece floor and Grandt Line details. The truss rods are wire, as are the grab irons which you have to bend to shape and drill holes for. The roof walk is strip styrene. The car comes with Grandt Line trucks and a complete instruction sheet with photos of the model and a full size set of plans from Darr (Yes, that's Darr plans in a Star kit). The kit sells for \$49.95 and should speed up the process of filling your yards with 3000 series boxcars. Bob Brown.



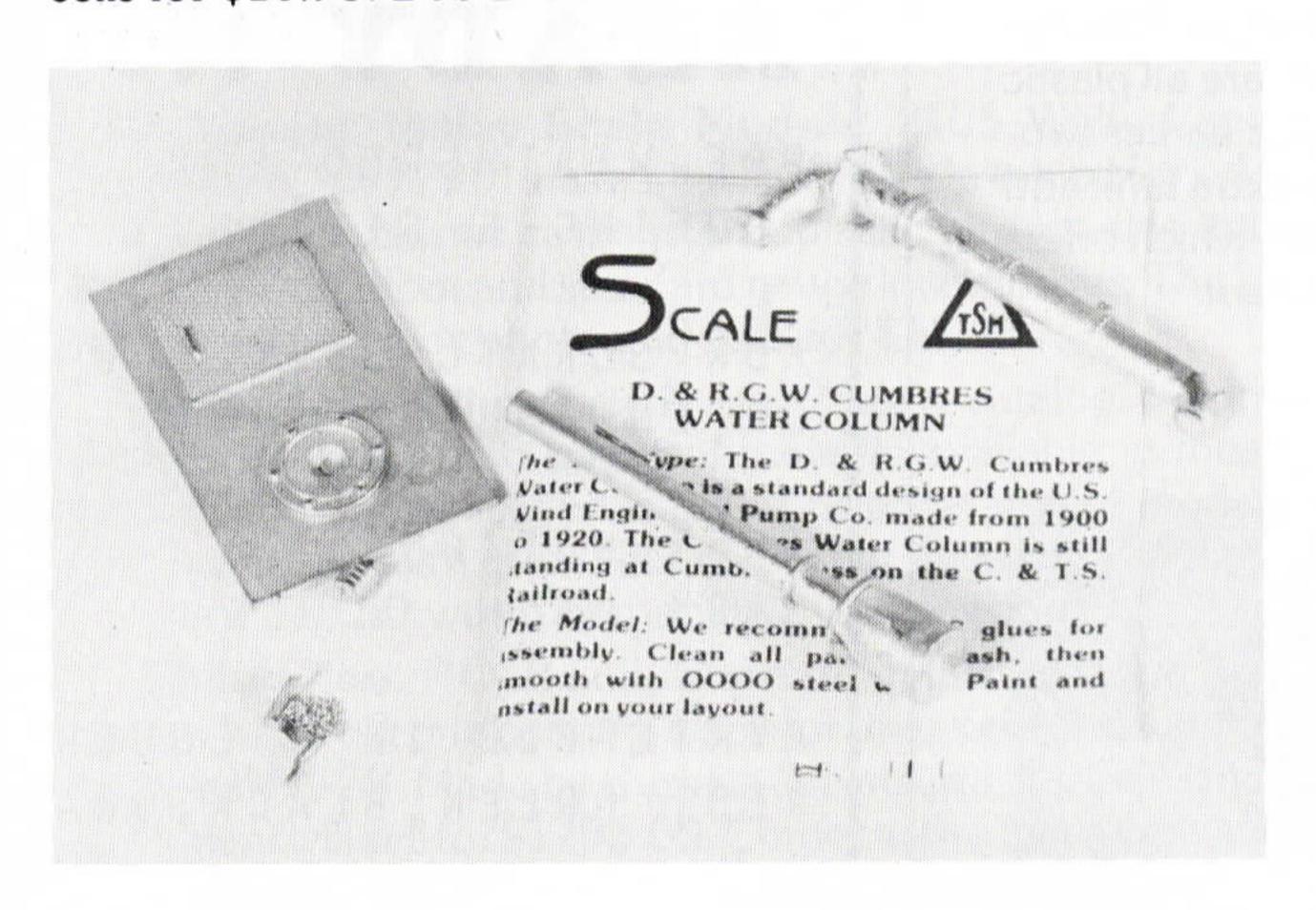


Mini-Structures, 549 Del Norte Ave., Corning, CA 96021 has been in business since 1956, but I just recently had a chance to look at one of its kits. I was pleased. Mini-Structures has a large list of S and O scale structure kits. There are 51 narrow gauge stations, six coaling stations, 26 water tanks, 14 roundhouses, as well as turntables, trestles, bridges and standard gauge buildings. I chose to review the O scale SP narrow gauge Laws station. The Laws station is over 26 inches long and consists of pre-cut illustration board sides, ends, floors, roof, and platforms. All windows and doors are cut out and all the parts are cut to shape. The wood parts are pre-cut pine and are bundled together with correctly labeled part numbers. The windows and doors are Grandt Line parts, and the roof material is cut strips of sandpaper. The sides have the boards drawn on in pencil so you may want to overlay with battens or scribe over the pencil lines. The Laws station sells for \$41.95, which is a good price for such a large station. The kits come with full size plans and two pages of instructions. Look into this line of structures and see what they can offer you. Each kit is made up for you after you order it, so allow about ten days for this. Bob Brown.

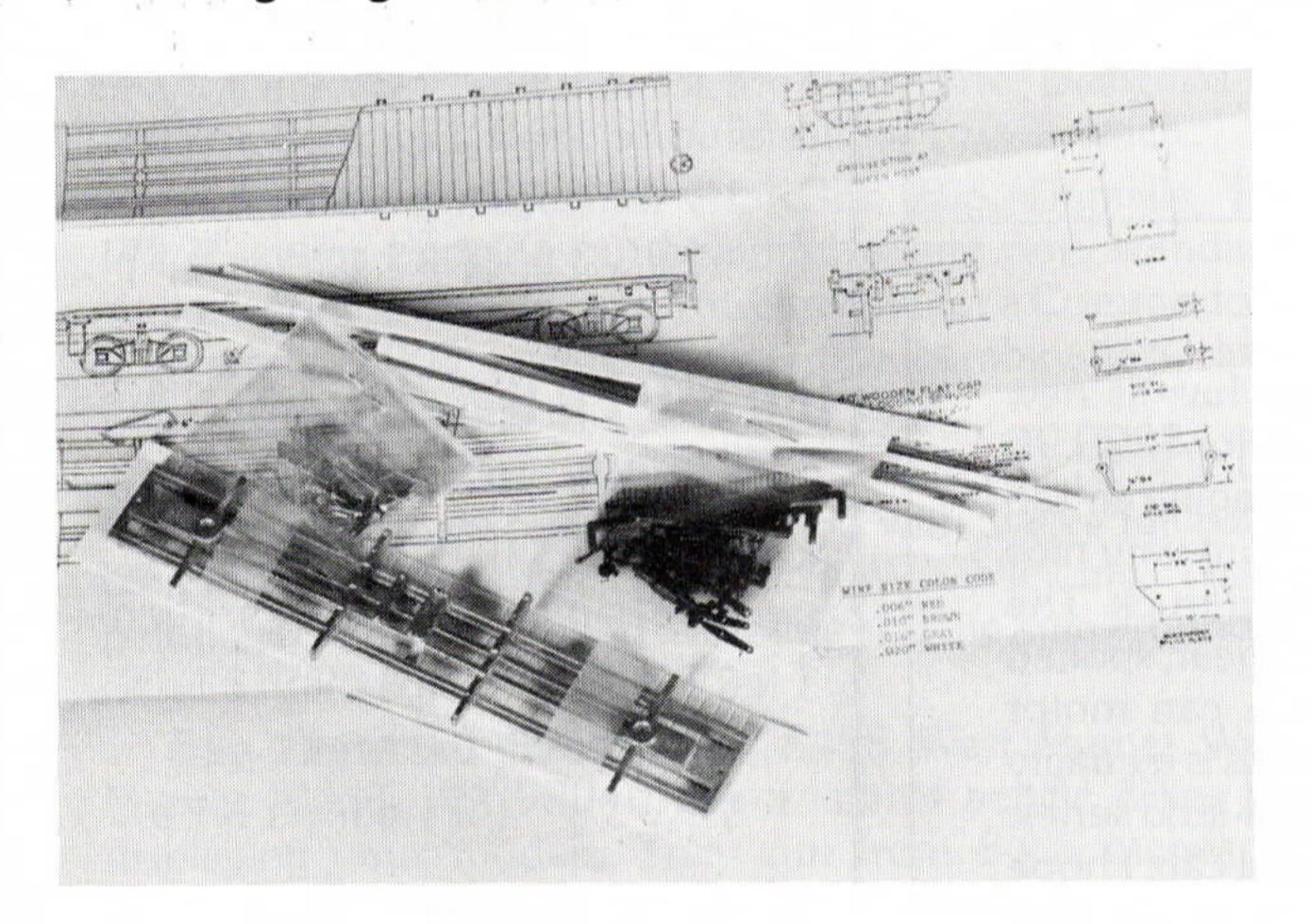


Russ Simpson, P.O. Box 256, Smith Flat, CA 95727 has several new items available. In On3 he has a 24-foot West Side Lumber Co. Carter log flat for \$27.00. He also has some double and triple hung windows. In HOn3 he has West Side work gondola #15 in plastic for \$12.00 and West Side log flat #8 for \$9.50. These cars are less trucks and couplers. In ½-inch scale he now has West Side trucks in white metal and plastic including side frames, bolsters, brake straps, and wheels. Simpson is also offering bolsters in G scale for those of you who want to run these fine trucks on your LGB track. There are also some very nice brake wheels available in ½-inch scale. Bob Brown.

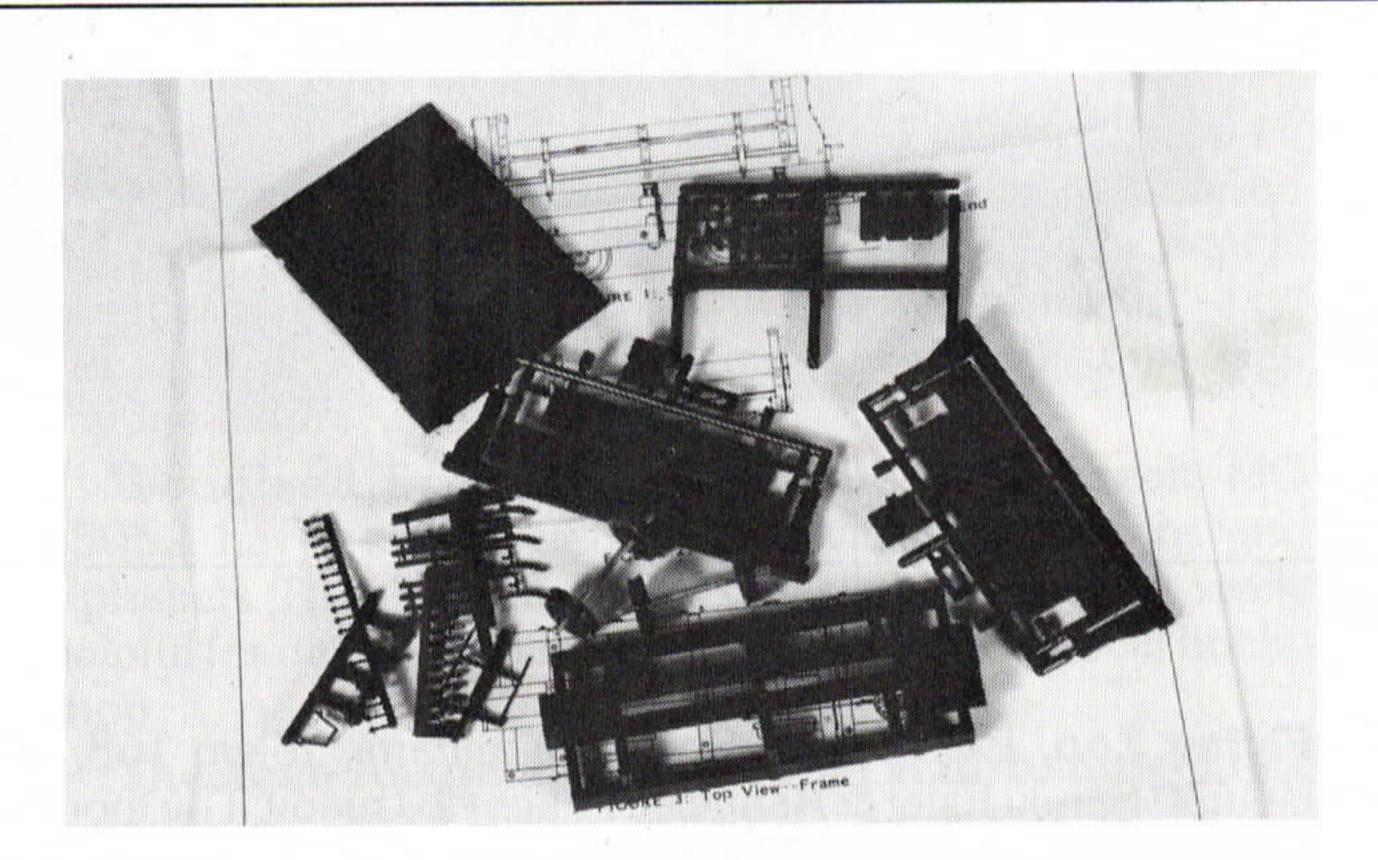
Triangle Scale Models, P.O. Box 8483, Long Beach, CA 90808 has a large list of Sn3 detail parts. Write for their catalog. One example is this white metal water crane which sells for \$10.95. Bob Brown.



The Futej Foundery, 1376 Greenhill Ave., West Chester, PA 19380 has a new HO gauge Cass 40-foot wooden logging flatcar ready. This kit is made up of a white metal mainframe, with white metal truss rod beams. The coupler pads, body bolsters, brake gear attachment pads, and center body sills are all cast in one piece. You must add styrene side sills and ends, a sheet styrene deck, and details to complete the car. The kit comes packed in a plastic bag, less trucks and couplers, for \$12.00. I am pleased to see eastern logging modelers getting a new kit. Bob Brown.



Trains of Texas, 10606 Sagewind, Houston, TX 77089 has its second kit available. It makes up into a backwoods On3 water tank. The kit consists of a cardboard tube which is covered with sheet scribed basswood. The underframing is cut out of color coded strip wood and can be cut for a high or low water tank. The water spout is a Grandt Line white metal casting as is a very nice little water pump. The rest of the details are also by Grandt Line. There is also a pre-formed ladder. The kit comes with a set of instructions and full size plans. The little tank sells for \$39.95. Bob Brown.

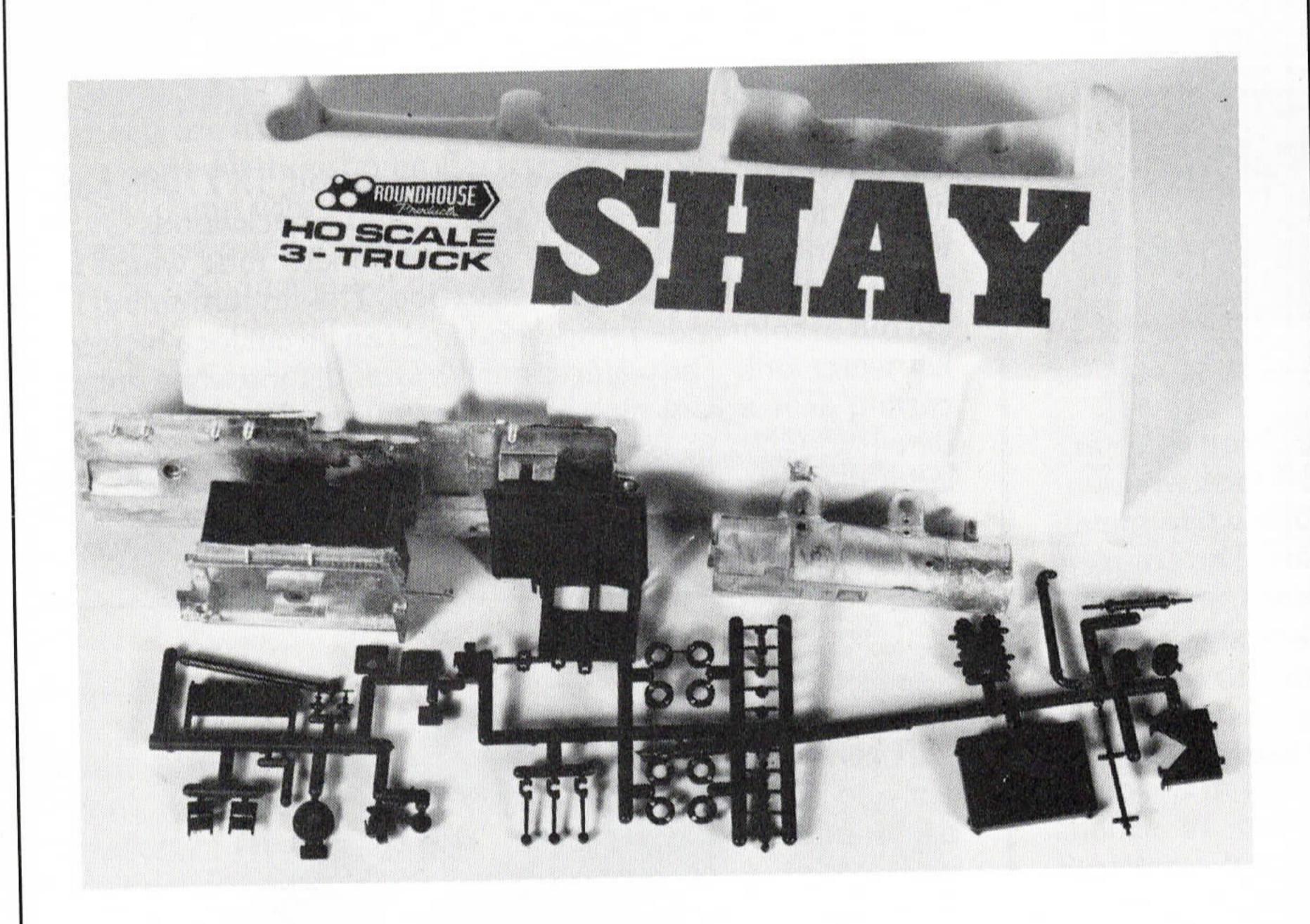


Grandt Line, 1040-B Shary Ct., Concord, CA 94518 has done it again. This time it's a beautiful little On3 Fairbanks-Morse #37 three cubic yard dump car kit. The car comes in several styrene injection moldings and has Delrin wheels and detail parts. The car can be made to dump like the prototype and is an excellent kit. A train of them would look great on any On3 layout. The kit sells for \$12.00. Bob Brown.

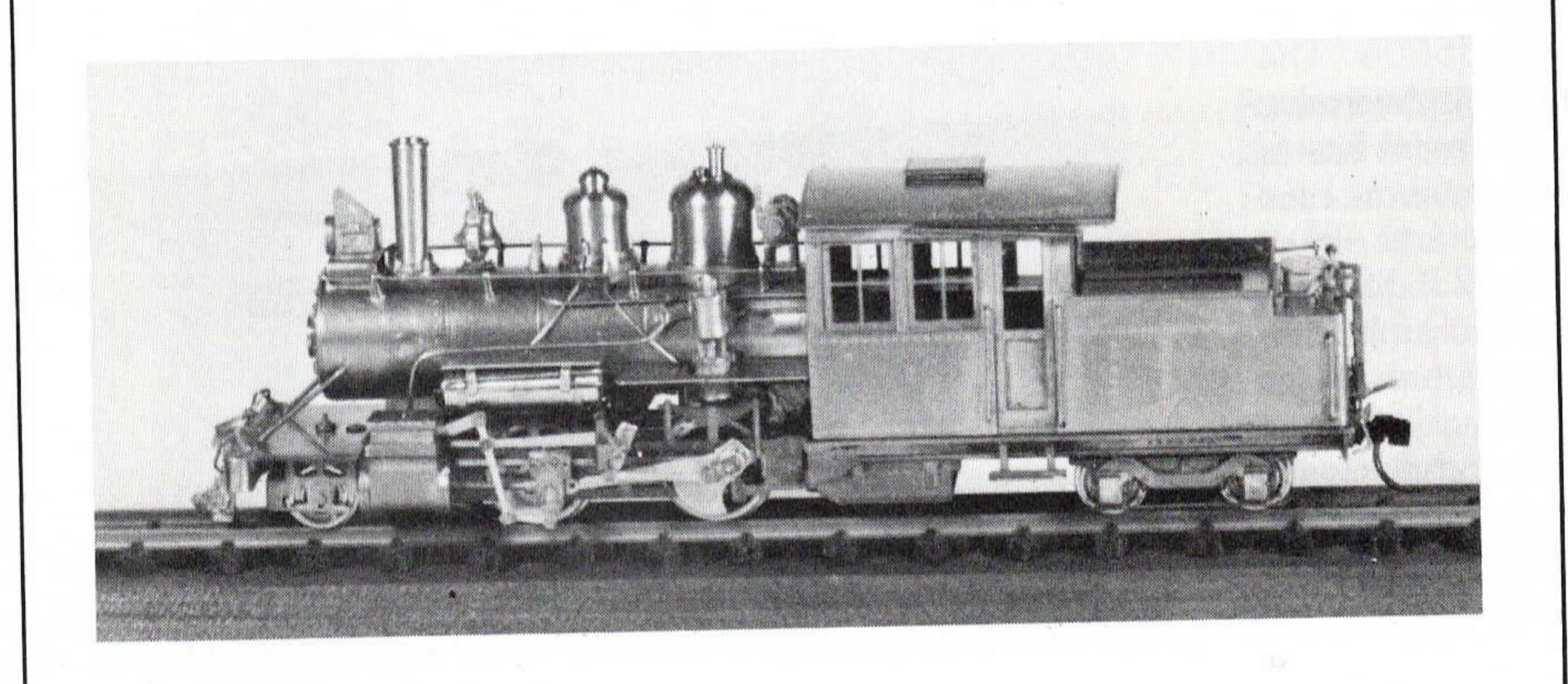
Puffing Billy Models, available from Coronado Scale Models, 1544 E. Cypress St., Phoenix, AZ 85006. The Puffing Billy Models line of kits and parts is made in Australia. The line consists of a series of HOn30 white metal kits of Australian narrow gauge rolling stock. There are some nice HOn30 Fox trucks and a mass of HO scale detail parts. As I sit here reviewing the materials I received, I see 27 different painted sets of details before me: a lathe, a blacksmith set, jacks, fuel tanks, sacks, a fire hose, a band saw, and water taps, to name just a few. These are excellent quality detail parts and it would be worth your while to check with Coronado about them. Puffing Billy is also making a locomotive superstructure designed to fit a Bachmann mechanism. Bob Brown.



Model Die Casting, 3811 W. Rosecrans, P.O. Box 926, Hawthorne, CA 90250 has issued their new HO gauge Class C, 70-ton, three-truck, three-cylinder Shay. It comes with a large balloon stack. The model is made of plastic injection moldings and has a white metal frame, boiler and domes, and tender frame. The motor is an open frame type and the drives and gears are all plastic and brass. The side frames are plastic. If you have assembled the earlier two-truck kit this one will be easy because it is the same except for the extra tank and trucks. These Shays offer a well designed and detailed locomotive which offers all sorts of possibilities for cross-kitting, and kit-bashing. Bob Brown.



Flying Zoo, P.O. Box 3, Suginami-minami, Tokyo 168, Japan has its new HOn30 Sandy River & Rangeley Lakes #10 ready. The model sells for \$229.95 and comes ready to run. The prototype for this Forney was a long engine and so is the model. It measures out at $4\frac{1}{2}$ inches. The model is made from very nice photo-engravings for the cab, tank, boiler, outside frame, and lead truck. The tender truck and boiler front are coined. The model has a full valve gear, spoked drivers, turned domes, stack and air pump, and a cast pilot. A can motor provides the power. My sample ran smoothly. Keep in mind that this is a quality import and is not to be confused with the earlier less expensive Mini-land series. Flying Zoo is planning a Bridgton & Harrison #7 soon, with a wood cab. I hope these little U.S.A. 2-foot prototype HOn30 models catch on. It seems to me that a beautiful layout could be built around a 2-foot theme but using ready-to-run HOn30 equipment. Bob Brown.



XIT'S BACKX TARPAPERS READY!!!

PRE-WEATHERED FOR ROOFING & SIDING

FOR SCRATCHBUILDING OR ENHANCING KITS

INSTRUCTIONS BY GARY NASH

AVAILABLE IN 4 COLORS RED, GREEN, BLACK, GRAY

HO-\$2.00 + 50¢ ship. O-\$4.00 + 50¢ ship. Sample - \$1.00

scenic materials:

ALL NATURAL COLORS, NOTHING DYED

COMPLETE SAMPLE KIT
of 117 COLORS & GRADES
of SOIL & GRANITE
\$9.35 (with ship.)

DUSTING KITS A or B

INCLUDES 5 COLORS PER
KIT of SUPER FINE
DUST FOR WEATHERING,
INSTRUCTIONS BY
GARY NASH
\$9.35 (with ship.)

BARBED WIRE

THREE 24" STRANDS FOR S SCALE & LARGER \$1.25 ea + 50¢ ship.

SEND SSAE TO:

ROCK QUARRY

3705 KNIGHT LN.

GARLAND, TX.75042





In Brief...

Arkansas Valley Scale Models, 2105 Wolfe Lane, Fort Smith, AK 72901 has a neat little O scale ash pit for sale. Consisting of plaster castings and plastic girders, this little facility will fit 3-foot and standard gauge locomotives. The kit comes with a color photo and sells for \$12.95...

Walthers has their new N and Z scale catalog. I didn't know there were 336 pages of material available in those scales! The center section is full of color photos of models and the cover has a great Nn3 color shot. Sells for \$7.95 but contains \$10.50 worth of money saving coupons...

Flying Zoo, P.O. Box 3, Suginami-minami, Tokyo 168 Japan has a big one coming. Look for their new G-gauge ½-inch scale K-28. Made by Kumata & Katsumi, this 34½ inch long giant will sell for \$1795.00. Comes with a can motor and is ready to run. Don't miss it. Due out in early 1985...

Tom Yorke's (P.O. Box 65, Sunland, CA 91040) little "Light & Industrial Railway Quarterly" for Summer, 1984 has a nice article by Mallory Hope Ferrell on the Argent Lumber Company. Send \$4.00 to Tom for a copy...

Hobby Helpers, 1512 Balmoral Ave., Westchester, IL 60153 has a new latex-like paint specially compounded to cover plaster. Called Plaster Color Paints, there will be 18 colors available. Comes in large mouthed 4 oz. jars; should be helpful in painting your scenery...

The Great American Buckle Company, 1944 N. Narragansett Ave., Chicago, IL 60639 now has some 4 x 6 inch plaques. They have one for the Durango & Silverton, one for the V&T, and one for the West Side. Designed to hang on your wall, these plaques sell for \$10.00 each...

Gauge One America, P.O. Box 235, Danville, PA 17821 keeps bringing out beautiful gauge one, standard gauge locomotives and cars. You can now get a Commodore Vanderbuilt NYC engine and a new combination club-baggage car in gauge one...

Hod Carriers, Inc., P.O. Box 266, Santa Fe, NM 87504 has a beautiful new calendar for 1985 with twelve full color paintings of scenes from the D&RGW Chili Line. These paintings capture the mood of the line and the area around it. Send \$12.95 for your copy...

San Franciso Seamaster, 8455 West Mercer Way, Mercer Island, WA 98040 has a line of acrylic cases for displaying your models. They run from 8 x 8 inches to 12 x 12 x 24 inches. Write to them for details...

Ξ.

18

A&W Industries, 290 North Benson Ave., Upland, CA 91786 has a neat spray booth for under \$100.00. Made out of vacuum formed ABS plastic, it should keep your workshop free of fumes when you are spray-painting. They also sell display cases in eight different sizes and three different types. The first type is acrylic dust covers. The second type has shelves and the third comes with pedestals for displaying various miniatures. Write to them for details...

Debusk Scale Models Co., 116 Hartwood Dr., Woodstock, GA 30188 is bringing out a ½-inch scale K-27. Comes in 1½ inch gauge and 1¾ inch gauge. You can order a kit for \$1795.00 or a built-up model for \$2495.00. Write to them for a detailed spec sheet...

The Layout Design Special Interest Group, c/o Doug Gurin, 605 Tennessee Ave., Alexandria, VA 22035 has a nice set of specification sheets, standards, and a Journal about layout design. The group is interested in developing a set of modular standards for general use. Write to them for details...

Restore the Falk Locomotive Fund, 3431 Fort Ave., Eureka, CA 95501 is trying to raise \$30,000.00 to restore the Falk (the "gypsy" engine shown in Robert's Ramblings in the September/October 1984 GAZETTE). Send your tax deductible donation to them soon...

North West Short Line, Box 423, Seattle, WA 98111 has a neat set of ball and socket joints and shafts. Check their ads for details...

The Pacific Short Line Railroad Company, 710 N. 19th St., Cottage Grove, OR 97424 is looking for Diamond & Caldor rail car #10. It was sold to the Keystone Supply Company in Pennsylvania and has dropped out of sight. PSLRR Co. wants to restore and operate the unit. Can anyone help?...

Woodland Scenics, P.O. Box 98, Linn Creek, MO 65052 has some great transfers available for signs and alphabets. They have over 16 sets available. These are really helpful for detailing your layouts. Check at your local hobby shop...

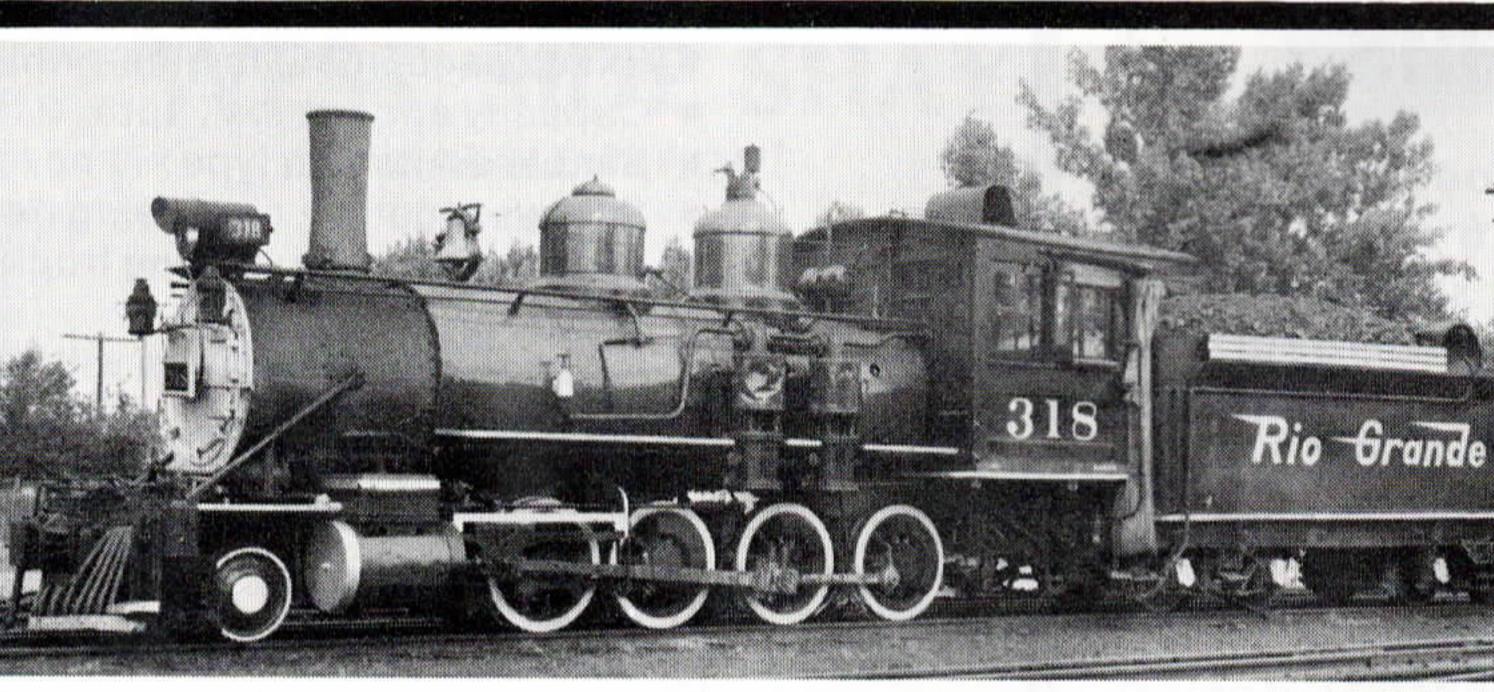
The Teen Association of Model Railroading, Lone Eagle Payne, 1028 Whaley Rd., R.D. #4, New Carlisle, OH 45344 offers many services to teenage modelers. An NMRA group, write to them for details...

The Gould Company, P.O. Box 463, Verdugo City, CA 91046 has another HO gauge freight car kit available. They have produced a 40-foot, 50-ton straight-sided flat car. The model is injection molded in grey plastic and fits together perfectly. For those of you who want narrow gauge quality in HO standard gauge, try one of these cars...

KEY IMPORTS Inc.

The Key to Quality

99 LYFORD DRIVE NO. 44 TIBURON. CA 94920

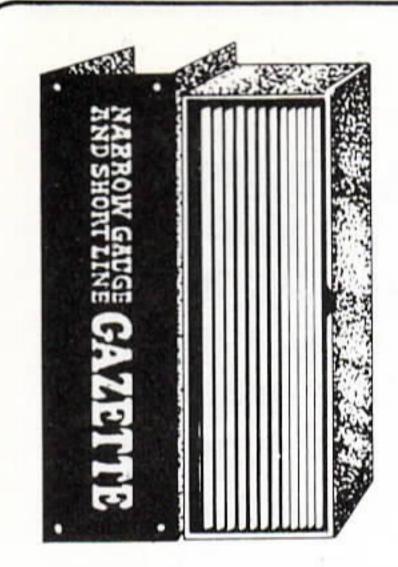


H. K. Vollrath Collection

Scenic Line
Scenic Line
School House

Prototype Photo —

The C-18 will be returning by popular demand in HOn3. Key Imports, Inc. will produce this famous Denver & Rio Grande 2-8-0 as the 315, 316, 318, and the 319. Highly detailed, state of the art design, the C-18's will represent the same superior standards of construction and Key quality that is present in our standard gauge locomotives.



PROTECT AND PRESERVE YOUR

NARROW GAUGE AND SHORT LINE

GAZETTE

COLLECTION

Keepyour GAZETTEs in these finely crafted and unconditionally guaranteed binders and cases custom made specially for the GAZETTE.

Binders are \$8.50 each or 3 for \$24.75 or 6 for \$48.00. Cases are \$6.95 each or 3 for \$20.00 or 6 for \$36.00.

For orders outside the U.S. add \$2.50 per unit for postage and handling. U.S. currency only. Include check or money order with your order. Please allow 4 - 6 weeks delivery in U.S.A.

Order direct from:

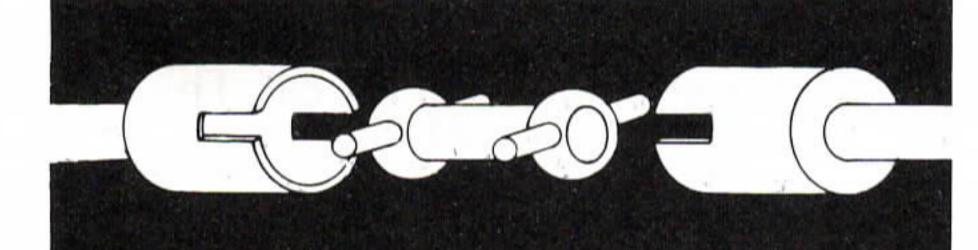
Jesse Jones Industries (since 1843)

Jesse Jones Building, Dept. NGSLG

D Street and Erie Ave.

Philadelphia, PA 19134

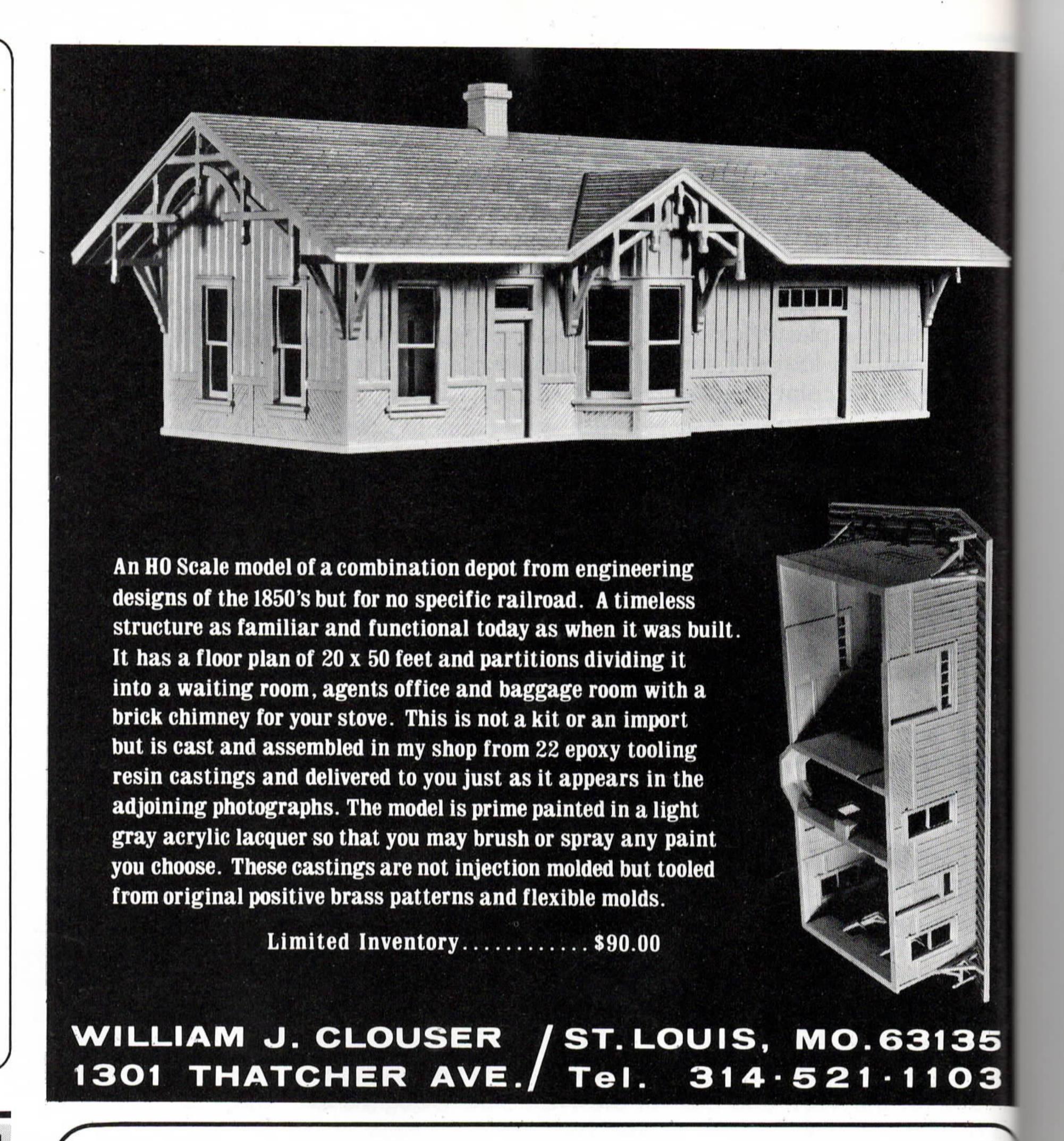
New Universal Drive Line Coupler Sets



Fit & Couple Different Size Shafts

Because one size does not fit all, we've introduced 6 new universal drive line coupler sets designed to fit a variety of motor/gearbox shaft sizes. Now you can replace those troublesome plastic tubing connections with these precision fit universals. Sets available to fit 1.2, 1.5, 2.0, 2.4, 3.0mm, 3/32 and 1/8" shafts. See your NWSL dealer or write for information sheet.

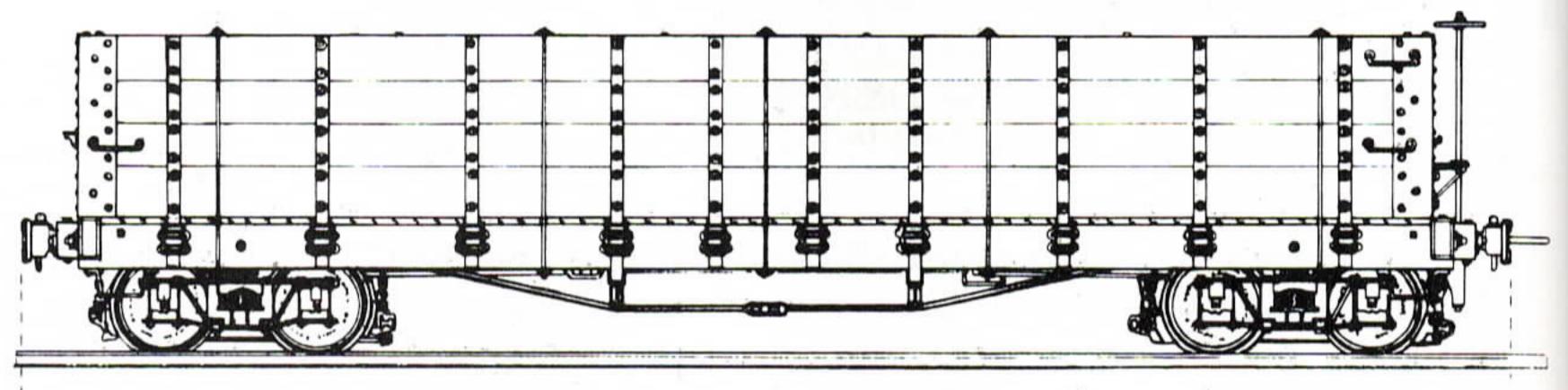
NorthWest Short Line Box 423 Seattle, WA 98111



Announcing new in Gm (1: 22.5)

D&RG COAL-CAR SERIES 9200

for ASTER and LGB narrow gauge, in highest quality



Length over couplers 468 mm (18.4"), hight 100 mm (3.9"), width 116 mm (4.6")

Kit with

- Over 2000 parts in wood and metal (precision castings)
- Working handbrake (working air-brake future separate kit)
- Exactly according to blue-prints of 1898
- Capacity appx. 4 lbs., appx. 2 lbs. empty
- Simple craftsman type kit, no metal work
- Screws together, no glueing needed
- Insulated wheels, sprung trucks, fully detailed

Only 500 numbered kits will be produced – order now

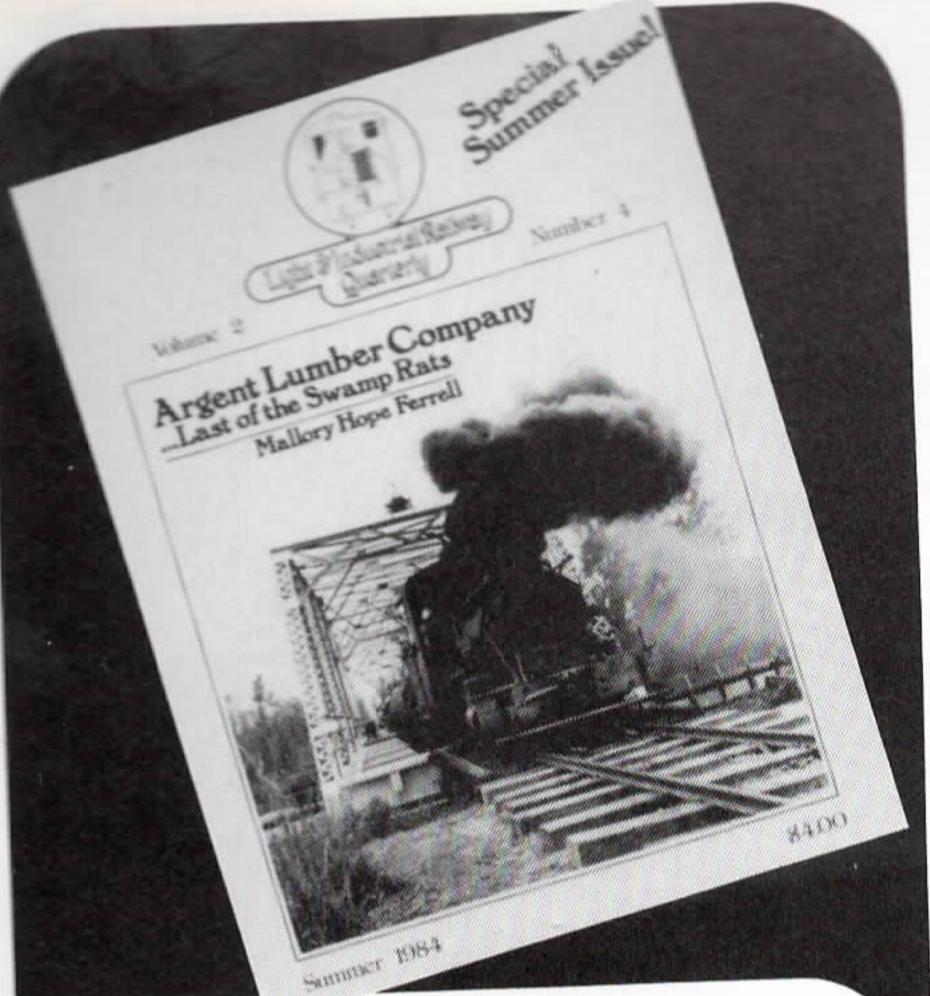
Delivery expected for March '85, price appx. \$ 245.— (SFr. 590.— at current rate) (finished models available too if sufficient request, ask for details)

Available only through:

Please ask for details or place firm order (no payment required until shipment)

RG&W-SHOPS

Eisenbahnmodellbau R. Walt, Rainstrasse 11b CH-8808 Pfäffikon SZ Switzerland



AVAILABLE NOW

The story of Argent Lumber Company --Last of the Swamp Rats.

Mallory Hope Ferrell takes you back to 1955 to the woods and swamps of South Carolina and Georgia to discover a unique 3' gauge logging railroad. The smell of wood smoke filled the air as the tiny steamers squeaked and wheezed their way to and from the woods. The story is told in text and many never before published photos. Twenty pages on coated stock 8½" x 11". Thirtythree photos plus two scale plans. \$4.75 in the U.S.A. and Canada, \$5.50 foreign.

Thomas A. Yorke Ent., P.O. Box 1330, Fontana, CA 92335-0421.

Any and All, Western (WA, OR, CA, NV.) Narrow Gauge 30"/36" Rail Roadania and Memorabilia.

> **Timetables** Pass's Vouchers/bills Stationery **Photos** Locks/keys Lanterns

etc, etc...

For proposed Narrow Gauge RR Museum won't you please help! Send description and price to:

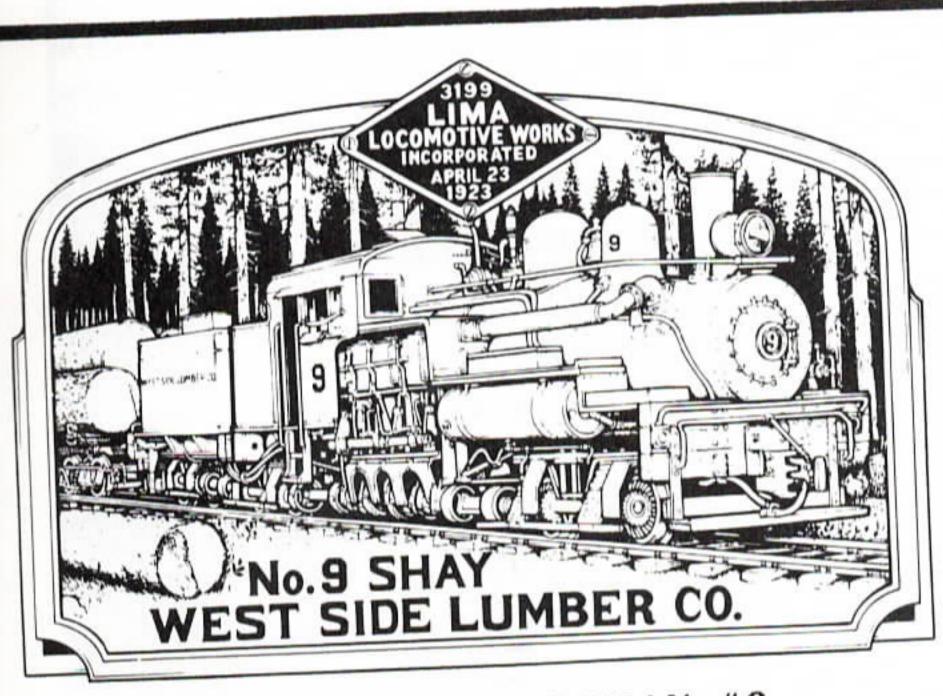
Pacific Short Line RR Museum

710 N. 19th St. Cottage Grove, OR 97424 (503)942-5117

HUNDREDS OF NARROW GAUGE PRODUCTS. KITS, TRACKWORK, DECALS, PLANS, STYRENE AND METAL DETAIL PARTS, TOOLS, SCRATCH SUPPLIES AND EARLY WEST SIDE PHOTOGRAPHS, SINCE 1965.

P.O.BOX 256, SMITH FLAT, CA 95727

HO-S-O-G SCALES. GENERAL CATALOG \$2.00 WSL PHOTOGRAPH CATALOG \$2.00, BOTH\$3.00



WEST SIDE SHAY

MARBLE PLAQUE 4"x 6"

\$10.00 EACH

ILLINOIS RESIDENTS ADD 6% TAX

ALSO MP-7 V&T GENOA MP-9 DURANGO STATION

MP-5 WEST SIDE SHAY #9



GABCO 1944 G N. NARRAGANSETT AVE.
CHICAGO ILLINOIS 60639

SEND SSAE FOR ADDITIONAL STYLES

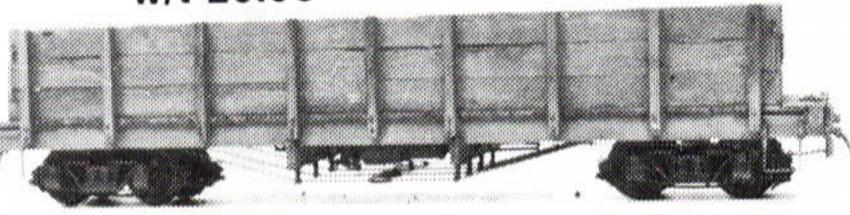
for the SERIOUS SCRATCH BUILDER

On3 Generic Freightcars . . .

Russian River Freight cars have been designed for the discriminating On3 modeler who wants to build a fleet of plain old frieght cars without the bother & expense purchasing all the items separately. Each kit includes quality basswood lumber, complete instructions and all the Grandt Styrene castings necessary to make a fully detailed, award winning model. All cars are now available with or without Grandt's Archbar Trucks to fit your specific railroad's design.

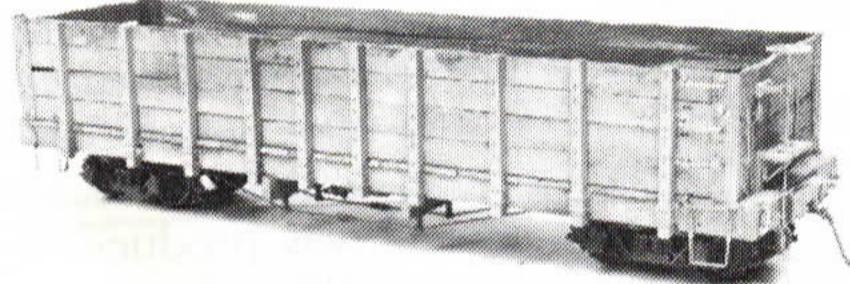
#100 30' - Flat w/t 18.95 1/t 12.95

#101 30' Lo Side w/t 20.95



1/t 14.95

#102 30' Hi Side w/t 22.95



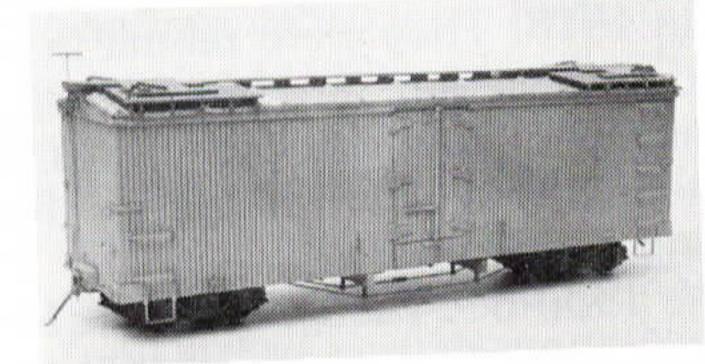
#103 30' Boxcar w/t 28.95



1/t 22.95

1/t 16.95

#104 30' Reefer w/t 27.95



1/t 21.95

Kits are undecorated and less couplers Add \$1.00 to credit card orders for handling. Postage paid on direct retail orders.

Russian river

3515 Palomino Drive Arlington, TX 76107 (817) 465-8308



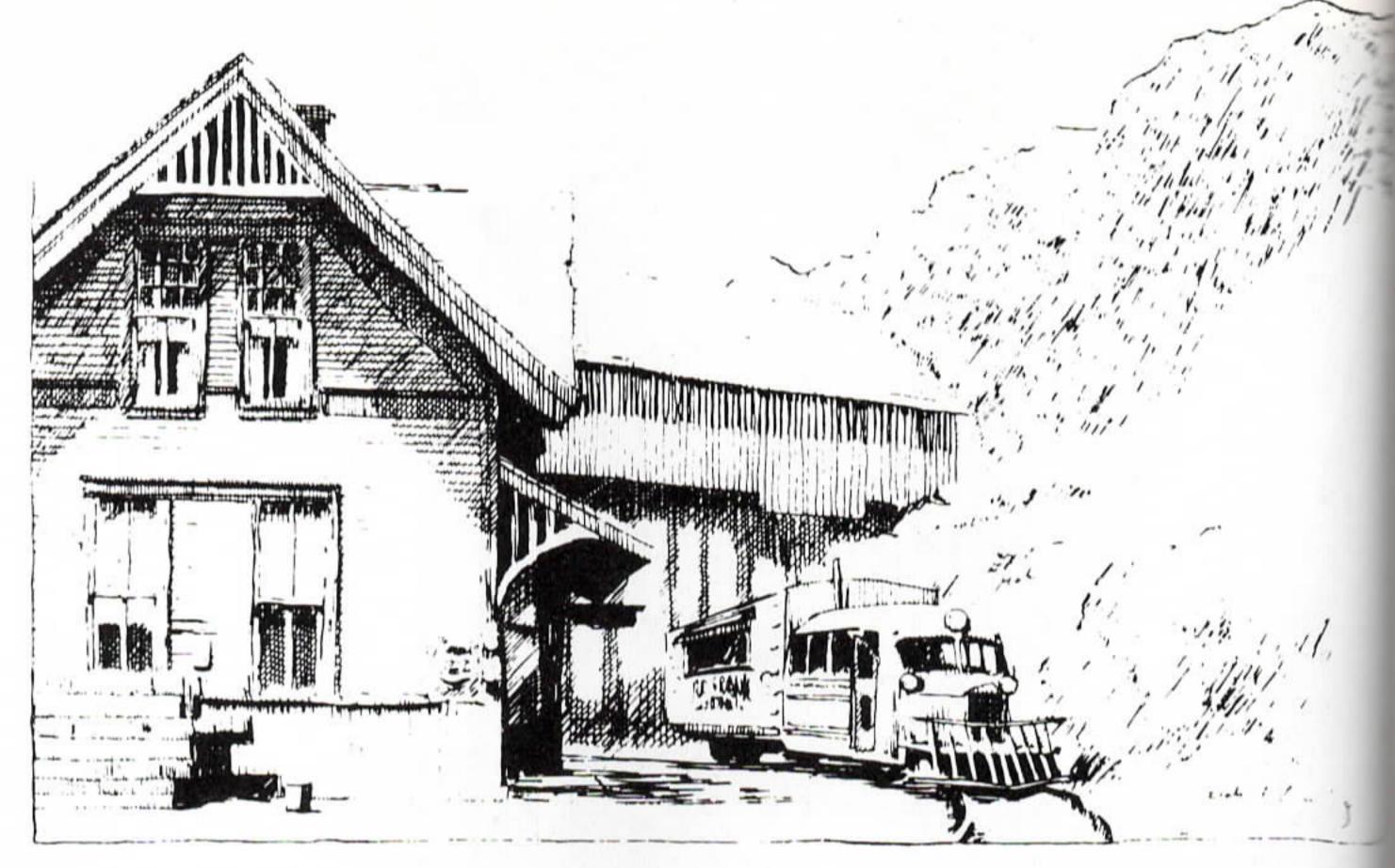
DEALER INQUIRIES INVITED







Photos by the author



D&RGW 6000 SERIES FLATCARS

The story of the Denver & Rio Grande Western flatcars is more interesting than you might think; the variations on these flatcars could easily fill an entire volume of the **GAZETTE**. It is also interesting to note that the Rio Grande's fleet of flatcars grew over the years rather than diminished as did the road's other narrow gauge freight equipment.

The first D&RG freight car was built in 1872 as 4-wheel flatcar #1. Plans for and photos of this car appeared in the July/August 1981 **GAZETTE**.

This first crude flatcar was followed by 4-wheel car #501 and the 8-wheel 1500 series of flatcars built in 1872. The first major series of flatcars was produced in 1887 as the 6000 to 6099 series. These cars were 30-foot cars with wooden underframes and truss rods. They lasted a surprisingly long time; at least 16 revenue cars were sold to the U.S. Navy in 1942. As late as 1968, at least five cars were still in existence as maintenance-of-way equipment.

There was also a 6100 series of flats, numbered 6100-6111. I found a reference to these cars in a 1939 roster but have no other information about them. The 6200-6219 series were 36-feet long and were built in 1918. They were rebuilt in 1937 with cut down standard gauge cast steel bolsters, steel draft sills and angles. They retained their truss rods during this rebuilding.

The 6300-6314 series cars were built in 1926, a year of frenzied activity because the Rio Grande's narrow gauge rebuilding program was under full steam. These cars were 31 feet 6 inches long according to John Maxwell, though folio sheets show they may have been 40-footers. These cars were reinforced in 1937 with rail along the lower sills. These cars served the railroad until the 1940's.

A 6400 series of cars (6401, 6403, 6407, 6409, 6413) is listed in the 1923 roster as being 25 feet 9 inches long. There are also some oddball cars listed, numbered 6746, 6798, 6875, 6950, and 7447. These cars are described merely as 26 foot 9 inch

cars. I could not find any additional information on these cars, but they did not appear on the 1939 or later rosters I reviewed.

In 1940-1944, the road built a series of steel belly flatcars converted from standard gauge gondolas built by the American Car & Foundry Company in 1907. These cars were numbered 6500-6544 and were modern-looking, heavy duty narrow gauge flatcars that served the road until the end of operations. Two of the flatcars, 6526 and 6527 were rebuilt in 1955 as bulkhead flats.

In 1955-1957, the road was faced with an increasing need for idler flats to service the expanding Farmington Oil Fields. To meet this need, several standard gauge cars were converted into narrow gauge flatcars. These steel flats were numbered 6600-6694 and 6400-6407. They were rebuilt from AC&F 1909 standard gauge 62000 series boxcars, and AC&F 37000 series stockcars. Both series of cars were 37 feet 4 inches long. According to Maxwell, cars 6600-6619 and 6400, 6401, 6404, and 6407 were converted from boxcars and cars 6620-6694 and 6602, 6603, 6604, 6605, and 6606 were converted from stockcars.

About this time, the Rio Grande also constructed, or reconstructed some idler flats in the 6700-6774 series. These wood underframed flats were strengthened with rail and were used in oil service between gondolas carrying pipe to accomodate the extreme length of the pipe. According to some sources, the idler flats were to have been converted from 1500 series gondolas. However, it quickly became apparent to the shop crews that the wooden draft gear on these cars was not as well suited as the steel draft gear on box and stock cars. Consequently, for a short period of time, out-of-service house cars were cut down for idler service but assigned gondola numbers to fool the management. After a while, 6700 series numbers were assigned to these cars regardless of their origin. Rails were clamped along the underside of the side sills for strength and the cars were placed in service between open-endergondolas to allow for overhanging pipeloads. I would appreciate any information on these cars.

Thus the bulk of the Rio Grande flatcars were actually constructed or converted in the 1950's when one would gue that narrow gauge car construction would have long since been completed.

In the oddball flatcar department, flanumbers 1105, 1188, 1515, and 1770 and all pictured in Narrow Gauge Pictorial, Vall, R. Robb, P.O. Box 1891, Oakland, Call, R. Robb, P.O. Box 1891, Oakland, Call, and appear to be converted 32-for gondolas. Flats 9480 and 9515 are also shown and appear to be converted 32-for "coal cars" as the Rio Grande called the Again, information on these various od ball cars would be appreciated.

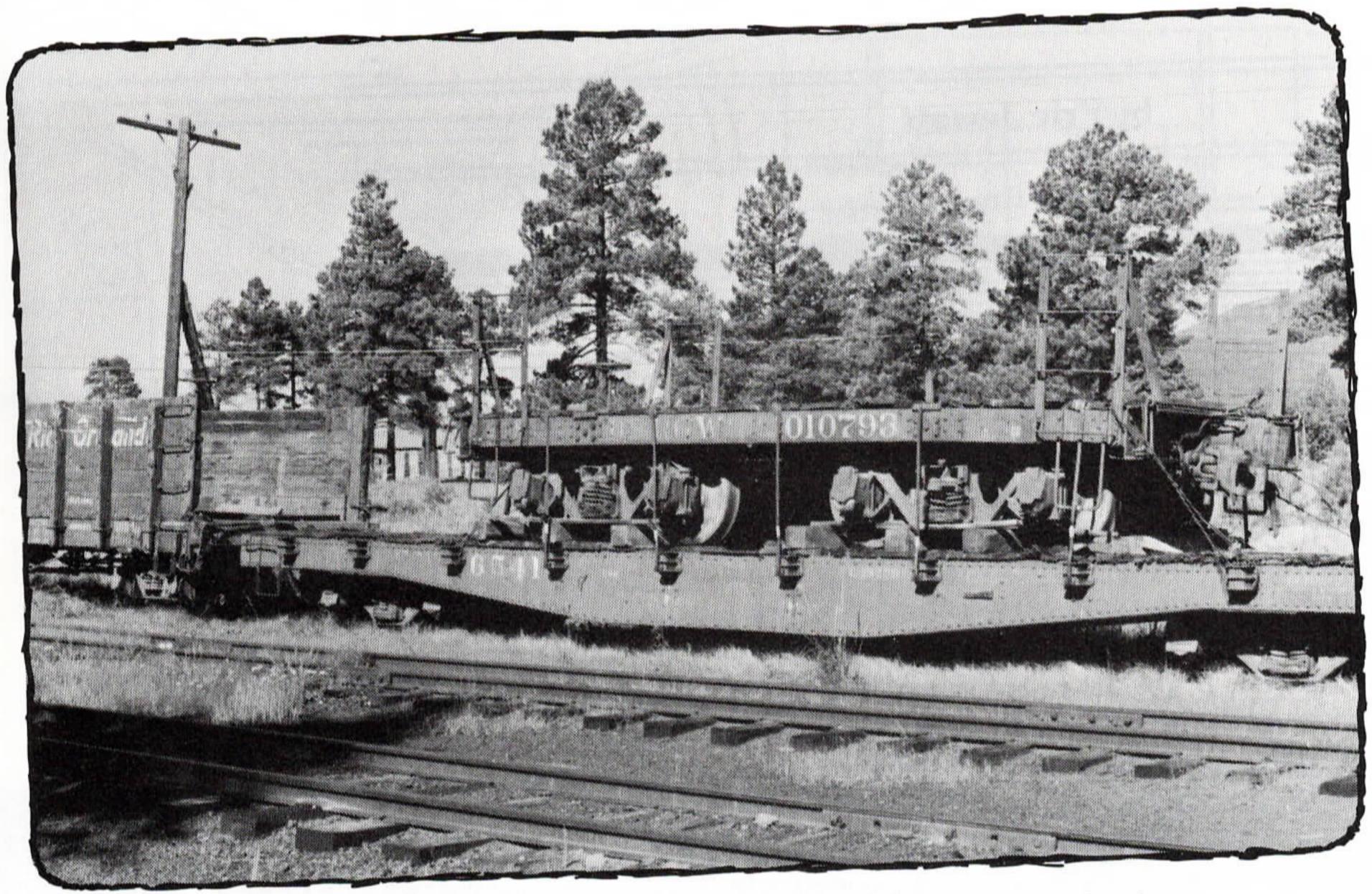
An entire column could be devoted flatcars used in maintenance-of-way us. The 1939 roster lists 16 flat outfit cars at eight of them remained as late as 196. Some of these flatcars were assigned to particle OB or derrick OP. Others did services as block cars or wheel and tie cars.

Narrow Gauge Pictorial, Volume 3 is a excellent source of information about the flatcars. This book also shows some of the oddball flatcars. For example, steel fis belly flat #6706 is shown with a simulated brakewheel whereas #6707 shown with a more standard end-mountabrakewheel. Flat car #6748 is shown with very unusual load—a K-37. However, the have been surprisingly few articles on the flatcars. Aside from the GAZETTE articulated in Robert Sloan's discussion early D&RG freight cars which appeared the May/June 1975 GAZETTE (out print)

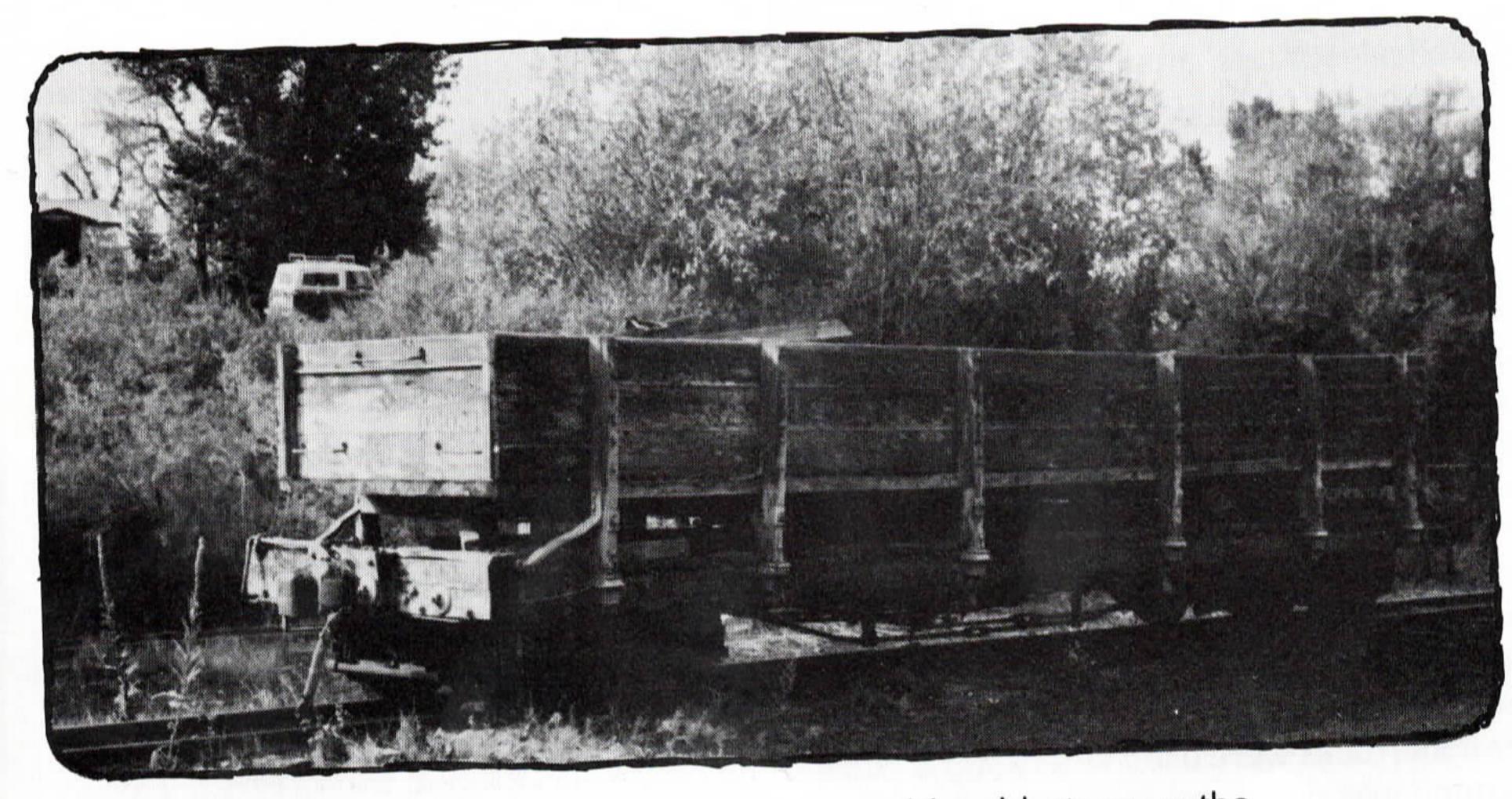
Fortunately for the modeler, D&F flatcar kits are more common than artical about them. In HO kits have been produced by many manufacturers including Tomal Balboa, Rail Line, Railcraft, and Alama Car Shops. In S scale, Tomalco also main idler flatcar kit and Triangle Scale Model offers a 6200 series flat. In O scale, cars and or have been available from Model Masses



D&RGW flatcar #9557 was converted from a "coal car". These cars had a rail reinforcement along the deck.



Most of a D&RGW 6500 series flatcar. Note the unusual load.



Work flat D&RGW #06051, now one of the oldest cars on the Cumbres & Toltec Scenic Railway.

D&RGW FLAT CAR PLANS

MAXWELL PLANS

D-64 D-62 D-158 D-146	6000 series flats, 1887 6200 series flats, 1918 6300 series flats, 1926 6500 series fishbelly flats 1940's
D-58	6600 series steel flats, 1950's
D-60	6600 series steel flats, 1950's
D-141	06063 with derrick OP

CORONADO SCALE MODELS

S-11 06084 block car

KEN PRUITT PLANS

06092	wheel and tie car
06008	with pile driver OB

Rocky Mountain Region NMRA Helper plans #26 (circa 1962) shows flatcar 06299 as an outfit car. This plan is out of print.

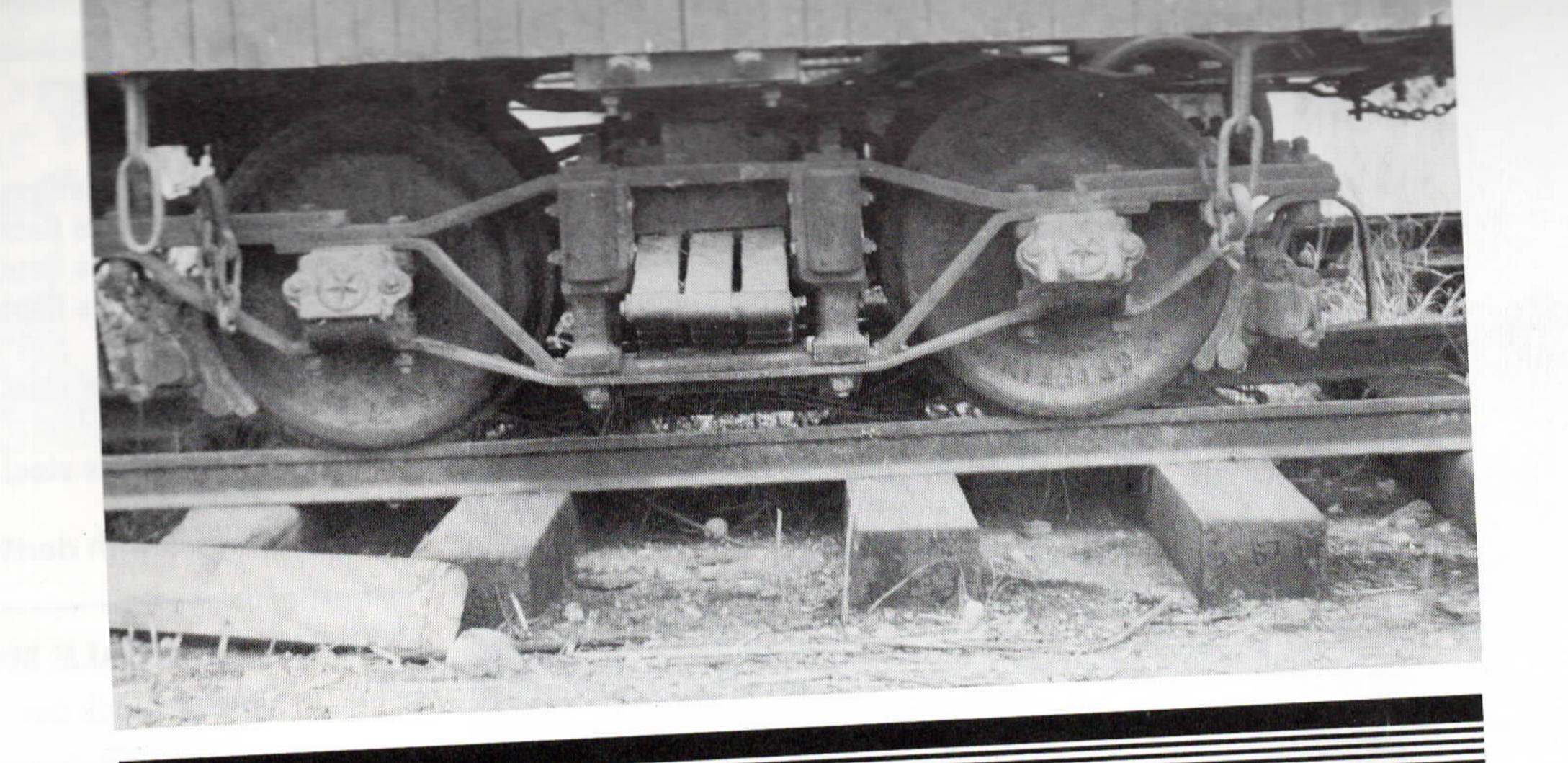
The Maxwell plans listed here are available directly from the Colorado Railroad Museum. The Coronado Scale Model's plan and the Pruitt plans are available from Coronado Scale Models.

pieces, Tomalco, Darr, Crossing Gate, and no doubt others.

While flatcars may appear dull and mundane, they were important to the development of the Rio Grande. Flatcars are very highly visible cars capable of generating a great deal of modeling interest. A weathered deck and unusual load can combine to create a very interesting model. Photos of flat cars in books almost always show them in a tatered or torn condition or carrying an interesting load. Flatcars offer more variety loaded than any other freight car. So why not give the lowly flatcar a bit of attention and add a few to your roster soon?

It was a pleasure to see and meet so many of you at the Fourth National Narrow Gauge Convention. Now that the winter season is setting in throughout the country, may I wish you a satisfying modeling season and perhaps a premature but nevertheless heartfelt best wishes for a joyous holiday season.

Laule



The Carter Connection

by Eric Jewett

Photos by the author

For a period of some thirty years, from the early 1870's through the turn of the century, the Carter Brothers of Newark, California, were the major narrow gauge car builders on the west coast of the U.S. Although primarily connected with the South Pacific Coast Railroad, Carter Brothers built many cars for western narrow gauge lines and streetcar systems. Some of these lines were the North Pacific Coast, Pacific Coast, Monterey and Salinas Valley, and Oahu Railway & Land Company. The best history of Carter Brothers is found in Bruce MacGregor's series of books on the South Pacific Coast (South Pacific Coast, Howell-North, 1968; Narrow Gauge Portrait - South Pacific Coast, Glenwood, 1975; South Pacific Coast: A Centennial, with Richard Truesdale, Pruett, 1982).

In addition to building both freight and passenger cars, Carter Brothers manufactured much of their own hardware, including at least three kinds of trucks. They had a relatively conventional sprung passenger car truck, a distinctive un-sprung freight car truck and at least one other type. In discussing SPC waycar #47, which wound up in the Owens Valley of California on the SP narrow gauge, MacGregor mentions that the passenger car trucks shown in the illustration in his Centennial SPC book are not the original trucks. MacGregor further mentions that waycar #47 was originally equipped with an obscure elliptically-sprung version of the Carter freight trucks with their characteristic five-pointed star cast into the journal box covers.

In 1889, the infant Oahu Railway & Land Co. placed its initial order for freight and passenger cars with Carter Brothers. They ordered flatcars, boxcars, two baggage cars, and thirteen 36-foot coaches. By the turn of the century the OR&L shops were building their own cars, often to Carter design, and apparently with Carter hardware. As a result, it is often difficult to positively identify a particular piece of rolling stock as original Carter Brothers or OR&L construction.

While I was taking some photos at the Hawaii Railway Society yard in Oahu I noticed that, while Carter-built coach #2 carries standard Carter passenger trucks, coach #57 is supported by what appear to be modified Carter freight trucks with elliptical springs, matching MacGregor's description of the original trucks on SPC #47.

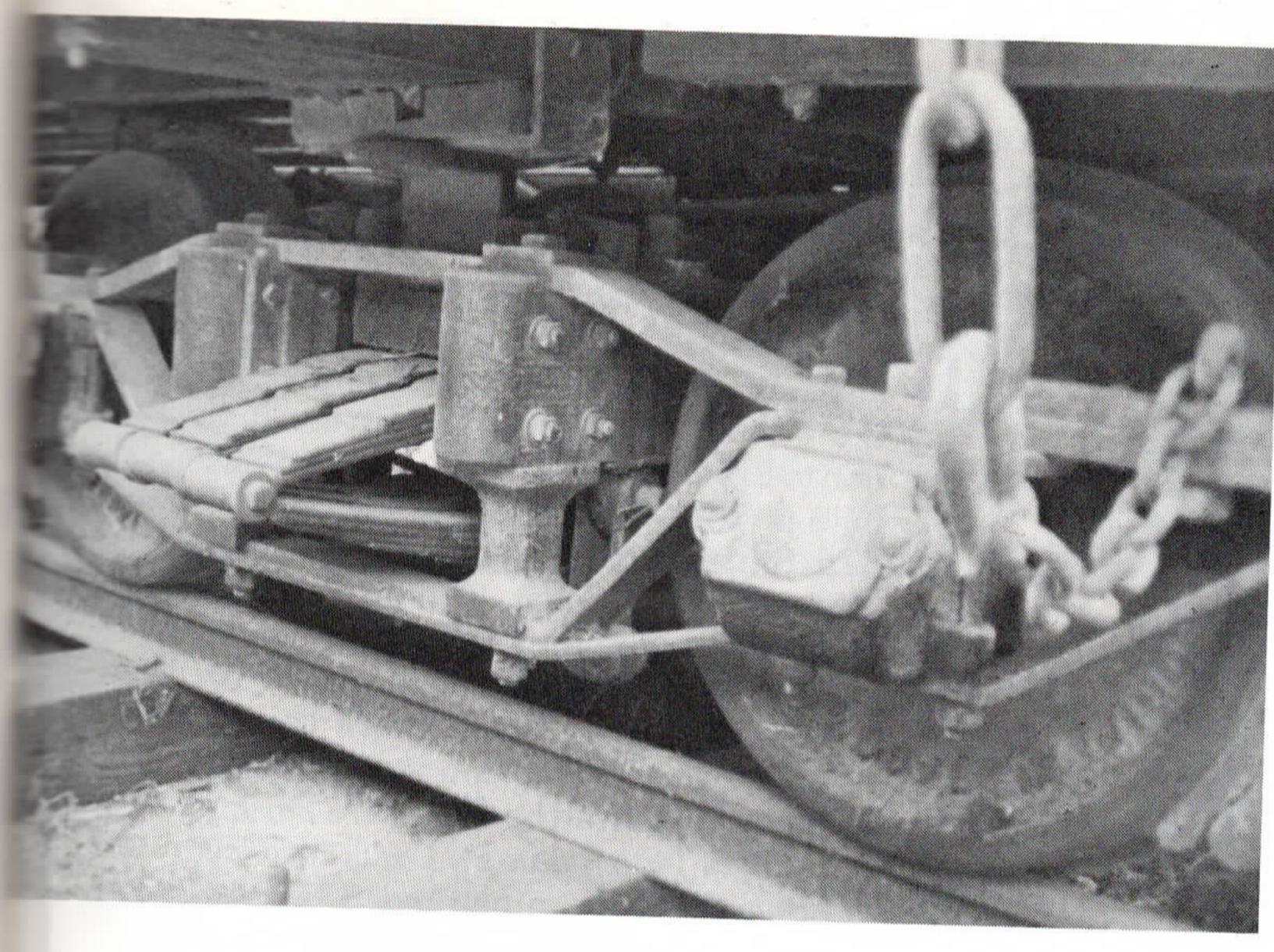
Aside from the characteristic stars on the journal box lids there are no marks on these trucks positively connecting them to Carter, and it is entirely possible that these trucks were constructed by the OR&L to Carter design. Close inspection of photos in Gerald Best's Railroads of Hawaii, Golden West, 1978, show this type of truck on the Carter-built baggage cars as well as the later OR&L coaches. All of the "first class" (with clerestory) coaches, both Carter and OR&L built, have more conventionally sprung trucks, suggesting that the sprung freight trucks were used where some cushioning was desired.

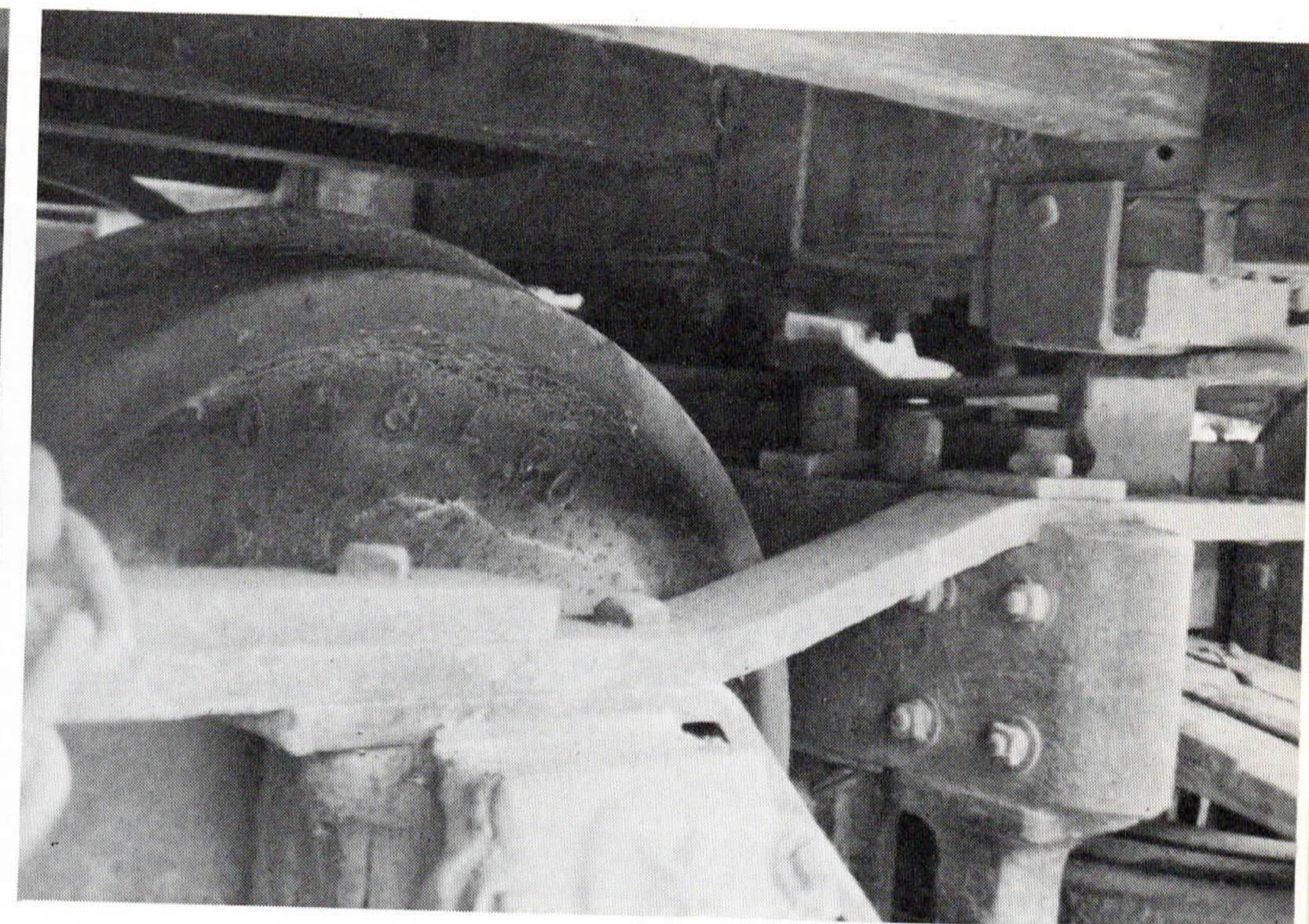
The design of the unusual truck I found

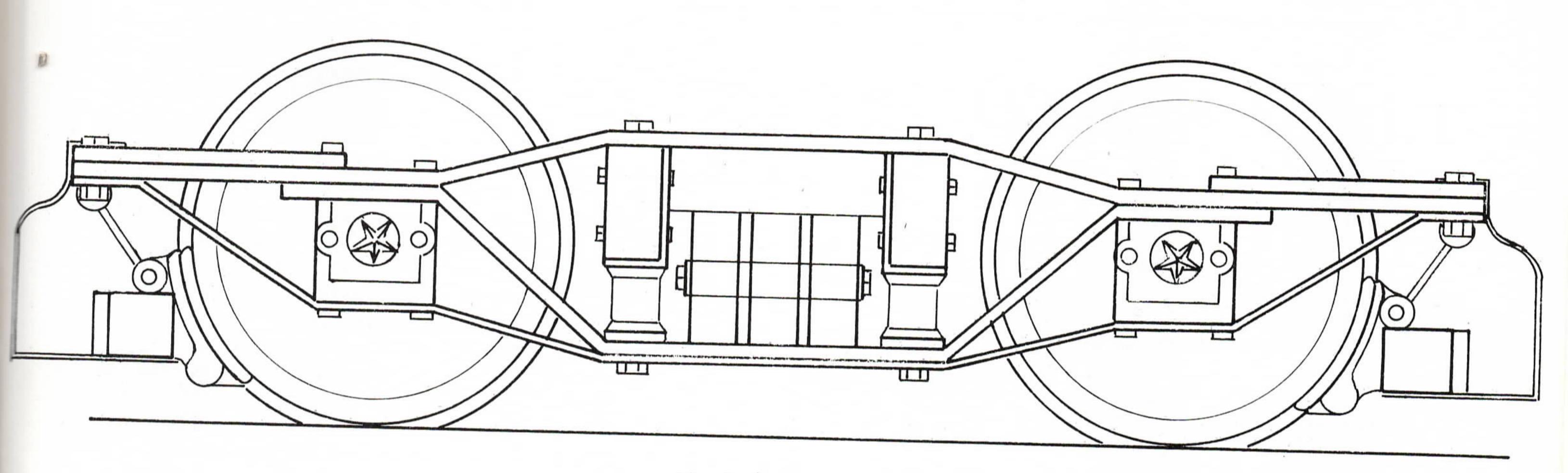
in the HRS yard is relatively simple. There are only eight small cast parts from two masters. Two $3\frac{1}{2}$ inch x 7 inch wooden crossbeams form the major load bearing member. The side frames are formed from 1×3 inch and $\frac{1}{2} \times 3$ inch steel strap. The ends of the perimeter frame are C shaped sections with a 1×3 cross section, and appear to be cut from 1-inch plate. The triple elliptical springs bear on the bottom of the sideframes between the crossbeams. The weight of the car is supported by the springs through a wooden block topped by a steel Z which bears on a steel plate on the bottom of the car.

Since this coach was built in 1921, after the Carter Brothers had vanished from the railroad business, it is likely that these trucks were built up from parts purchased earlier from Carter. A second intriguing possibility is that the OR&L ordered their freight cars with the sprung trucks and later replaced them with the coil-sprung arch bar trucks, reserving the Carter trucks for passenger-baggage car service. We may never know which of these possibilities is true.

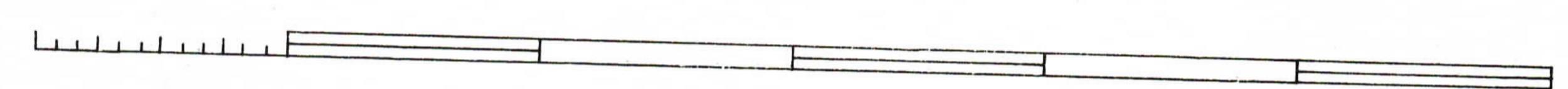
A reasonably accurate model of these trucks can be made by adding elliptically sprung ends (either handmade from brass or trimmed from another truck) to a freight truck with the proper appearance. Russ Simpson advertises Carter freight trucks in HO and O, and the Kemtron (now Precision Scale) HOn3 logging trucks of a few years ago are a near match.

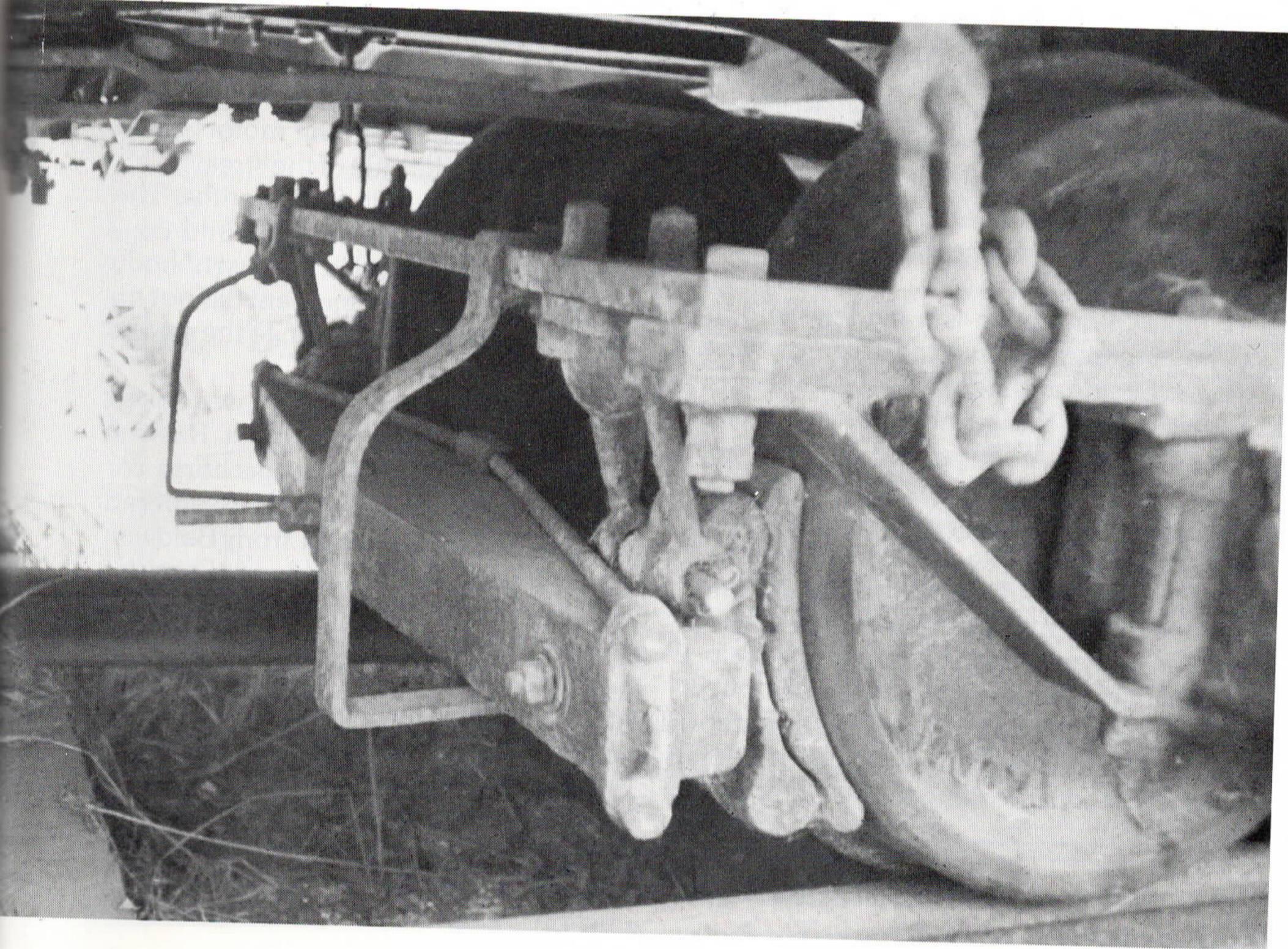






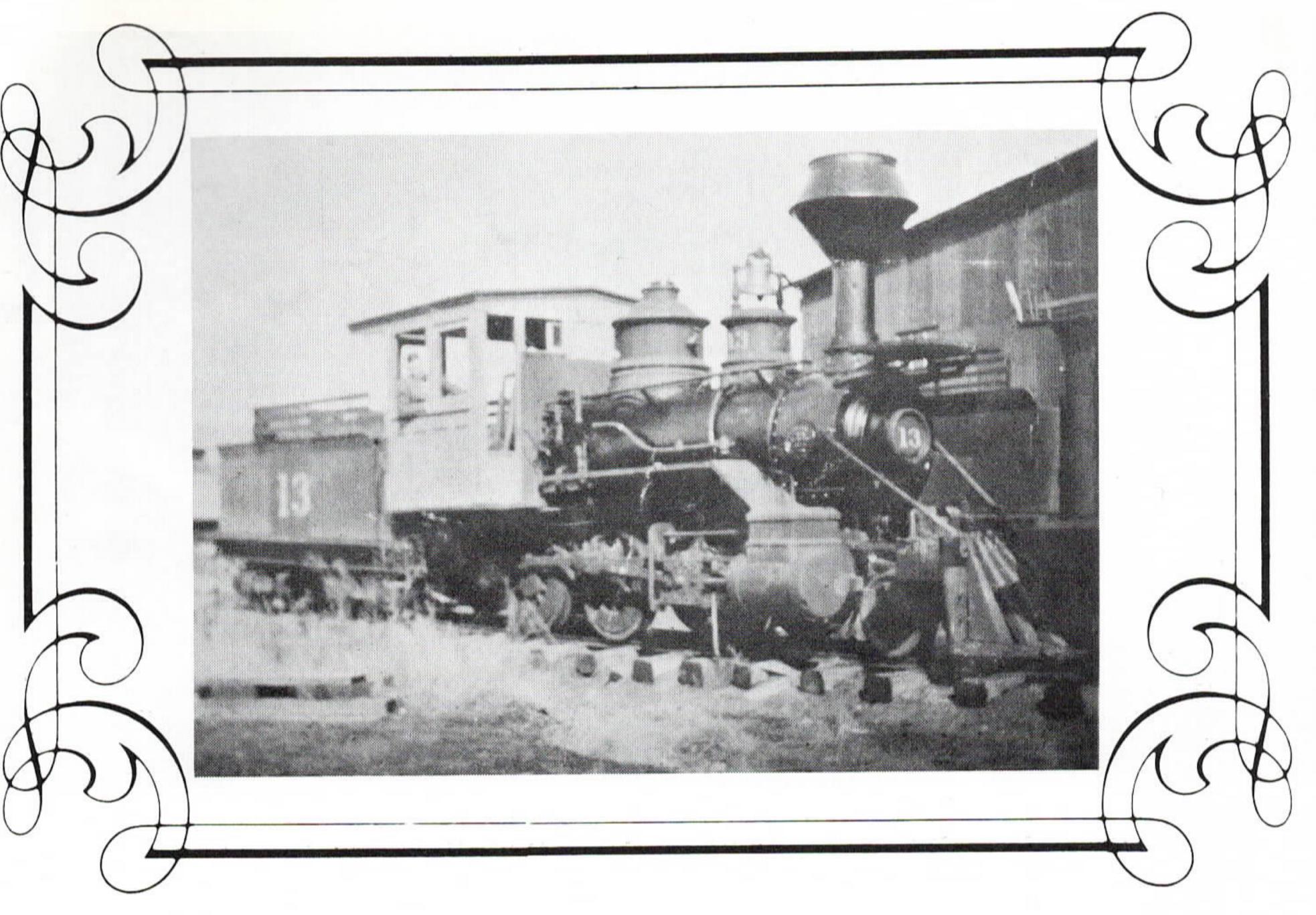
Plan by Eric Jewett







NOVEMBER/DECEMBER 1984



THE MINNEAPOLIS MOTOR LINE



by Albin Lee

This is a short history of a short-lived little narrow gauge railroad called the Minneapolis Motor Line. The name came from the motive power: steam-dummies, called "motors" in and around Minneapolis, Minnesota. The Motor Line was incorporated as the Lyndale Railway in July, 1878. The name was changed in 1879 to the Minneapolis, Lyndale & Lake Calhoun Railway. Track was laid to 3-foot gauge with 35 pound "T" rail. The initial equipment consisted of two new Baldwin steamdummies and two secondhand closed cars purchased from an eastern railroad. A single track line was built from downtown Minneapolis to Lake Calhoun with runaround sidings at each end and a passing siding about halfway along the line at 24th Street and Nicollet Avenue.

The first "motor" steamed up in the summer of 1879 on the 4½ mile long railway and took only took 30 minutes to make the run from downtown to the lake. Since there were no turntables, the steamdummies operated forward to Minneapolis and backwards to Lake Calhoun. In 1880 the line was extended one mile to Lake Harriet. Today the Minneapolis Transportation Museum operates a trolley car on the original Motor Line right-of-way between Lake Calhoun and Lake Harriet. If you get to Minneapolis be sure to ride this line.

The greatest expansion of the line came in 1881 when the line was extended another 15 miles to Excelsior on Lake Minnetonka making it 201/2 miles long. Turntables were added at both Excelsior and Lake Calhoun, where the shops were located. The name of the railway was changed at this time to the Minneapolis, Lyndale &. Minnetonka Railway. Naturally, the railway required additional motive power so it purchased two Moguls (2-6-0) from Baldwin. These little Moguls were only used between Excelsior and Lake Calhoun because they were not permitted on the streets of downtown Minneapolis.

Two more steam dummies were purchased from Baldwin in 1882. In the same year, seven second-hand, open passenger cars were purchased from a Philadelphia railroad and from the New York Elevated Railroad. These cars had to have their trucks changed in order to run on the 3foot line. In 1883 the railway added two new deluxe passenger cars for the Excelsion trains.

Lake Minnetonka is a big lake and its various communities and resorts were served by side and stern wheel steamboats. Excelsior was the terminus of the Motor Line, where you changed to a boat for your trip to any location on the lake.

As business increased, so did people's objections to smoke from the "motors." The Minneapolis City Council recommended that a different form of motive power be used. But the company maintained that no other suitable form of motive power was available. In spite of its apparent success, the railway had always been underfinanced and, according to the October 4,

1931, MINNEAPOLIS JOURNAL, it was "usually just one lap ahead of the sheriff" The company was apparently not interested in converting to cable cars because of the cost. Later they did try other alternatives to steam.

In 1884 the shops and turntable were moved from Lake Calhoun to the junction at 31st Street and Nicollet Avenue. The 2-6-0's then took the trains from the Junction to Excelsior. A single track line was also built in 1884 from the junction south to 37th Street on Nicollet Avenue, east across 37th Street to what is now Hiawatha Avenue and southeast on a private right-of way to the Minnehaha Falls Park.

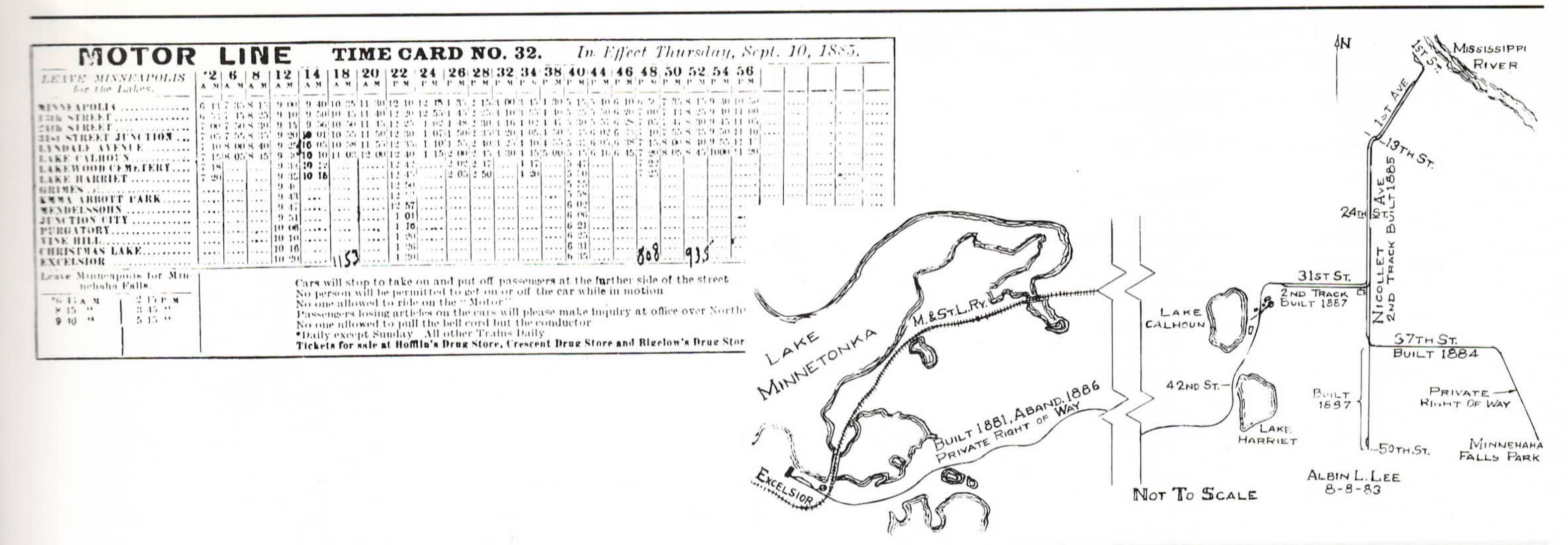
The company was in severe financial trouble in July, 1885, and was saved only by being purchased by Charles A. Pillsbur (of milling fame), James J. Hill (of Great Northern Railway fame) and S.S. Small The railway line was immediately improved by double tracking the line from downtow all the way out Nicollet Avenue to 37th Street. Two more steam motors were adde allowing for more frequent service on the

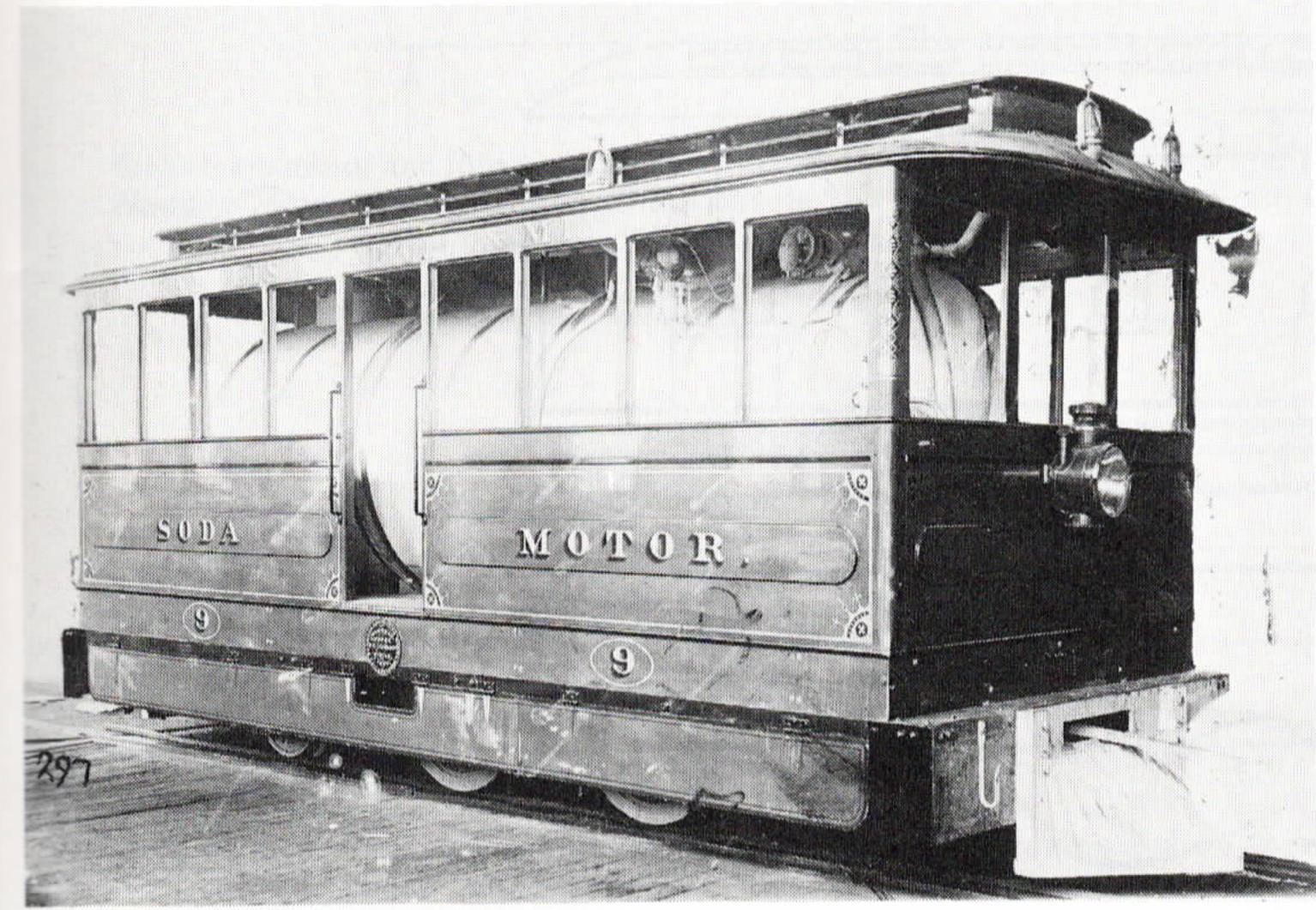
December 31, 1885, saw a bold ex periment tried out on the Motor Line. The Van Depoele Electric Manufacturing Company of Chicago built an electric railcar for the line, but the car was drastically under powered. It had only one 40 h.p. motor, but it was expected to do all of the switching downtown Minneapolis. The bold experment failed in only three weeks.

In 1886, another effort was made t solve the smoke problem. Four soda motor were purchased from Baldwin. These mo tors were based on a system developed Germany. A large insulated boiler wa charged at 329 degrees Fahrenheit with caustic soda solution. The equivalent of firm tubes in a steam locomotive were water tubes in a soda motor. Once the motor wa charged up, the steam exhausted from the cylinders was condensed to increase the temperature of the soda to generate mon steam. Much to everyone's chagrin, the discharged residue from the motors kille the foliage on either side of the streets. The experiment lasted only four months. The soda motors were then re-built into comventional steam dummies. At least nobod could say that the management did not to to find an acceptable solution to the smol problem.

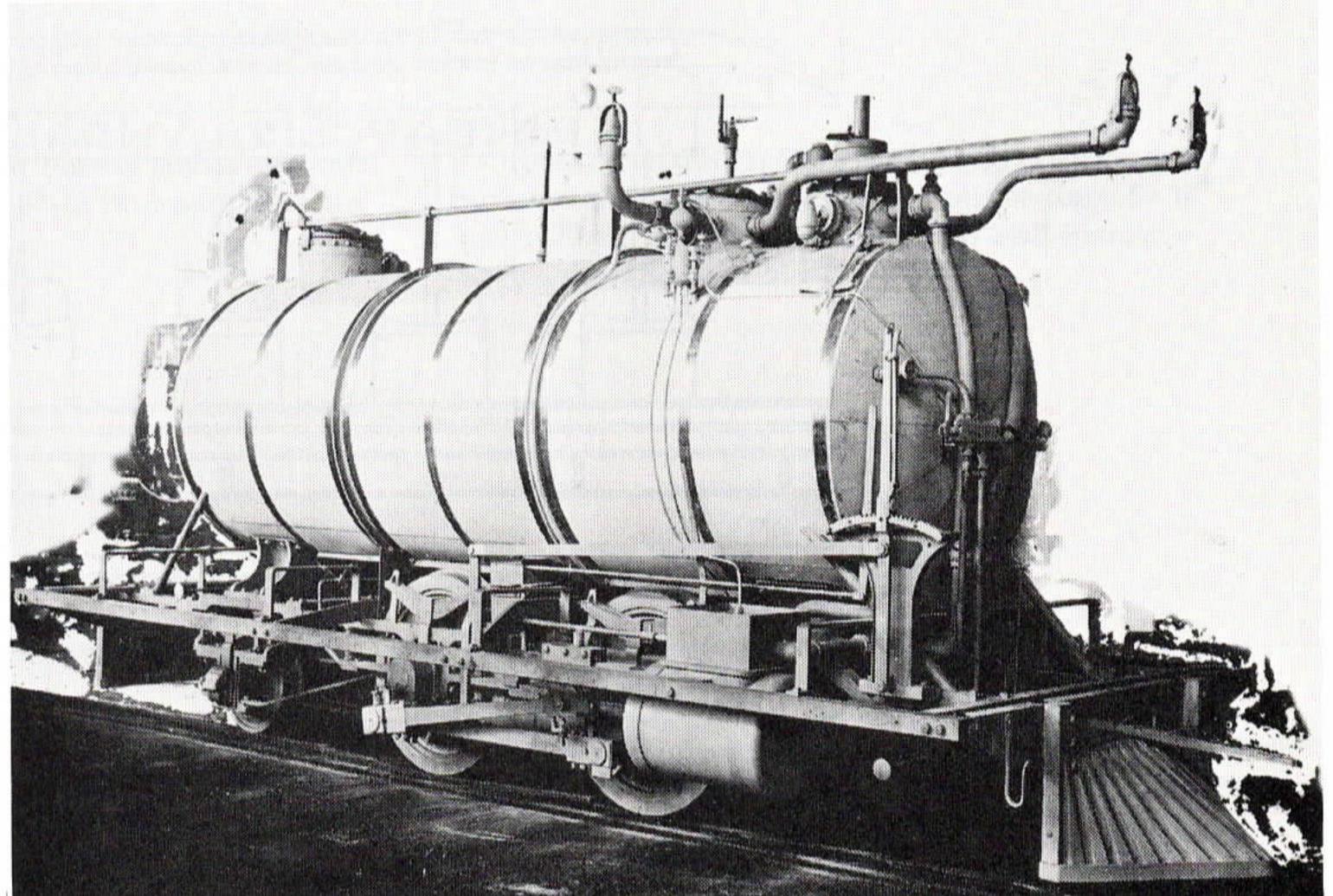
In 1887 the ML&M Rwy. was take over by the Minneapolis Street Railwa which operated 42-inch gauge horse lines in the city. The street railway ordered two more steam dummies from Baldwin and the line from Lake Calhoun to Excelsion was abandoned. However, after public protest, the company relented and restore service to Lake Harriet. The two Mogul were transferred from the Excelsior line the Minnehaha Falls Park line. The Motor Line then extended its Nicollet Avenue line from 37th Street, the end of double trace to 50th Street as a single track line. The company also built a second track from the junction to a little over halfway to Late

Title Photo: Sumpter Valley #13 (ex-Minneapolis, Lyndale & Minnetonka) taken at Baker City, Oregon between 1906 and 1915. Photo, collection of Mallory Hope Ferrell.

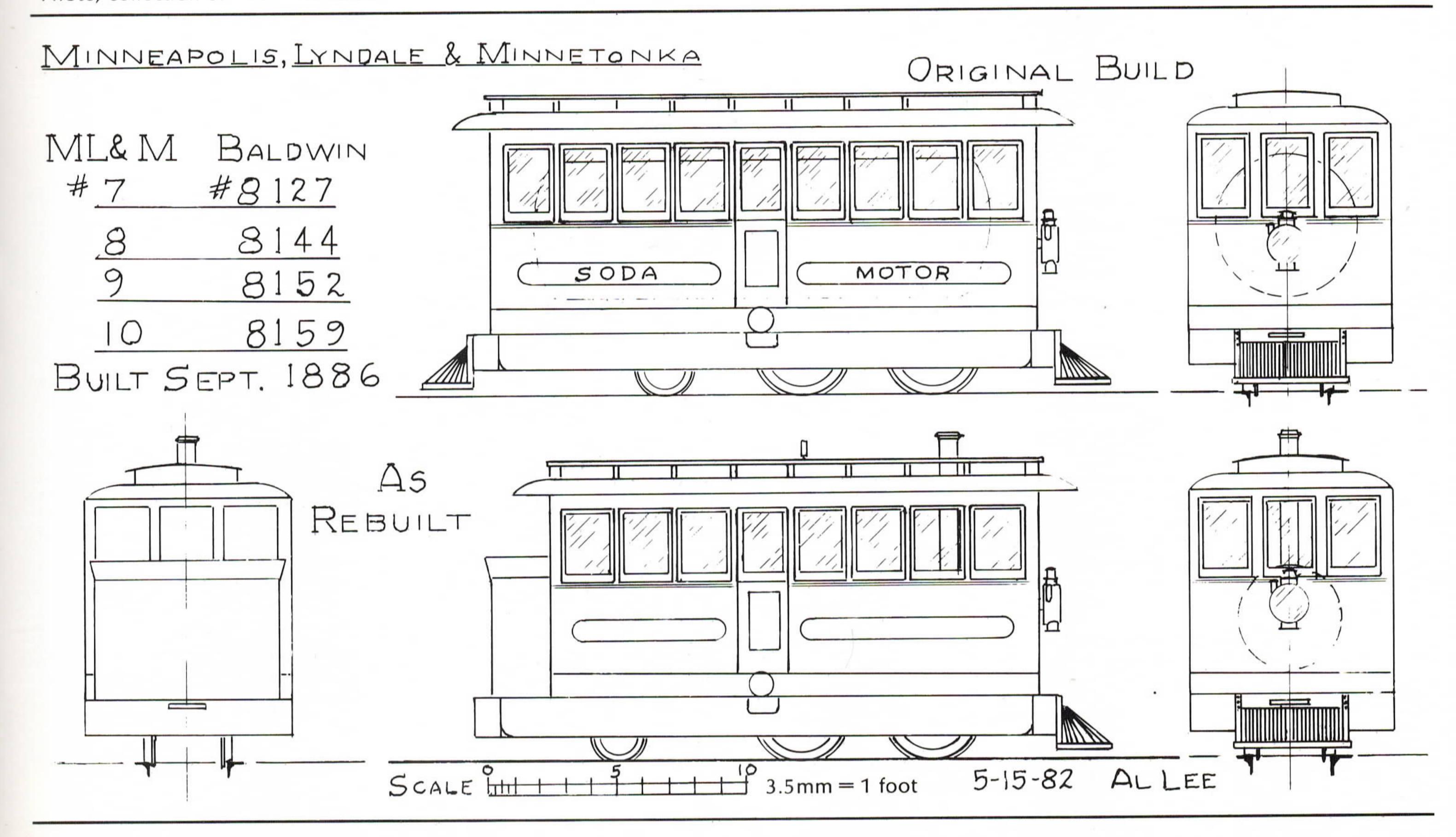


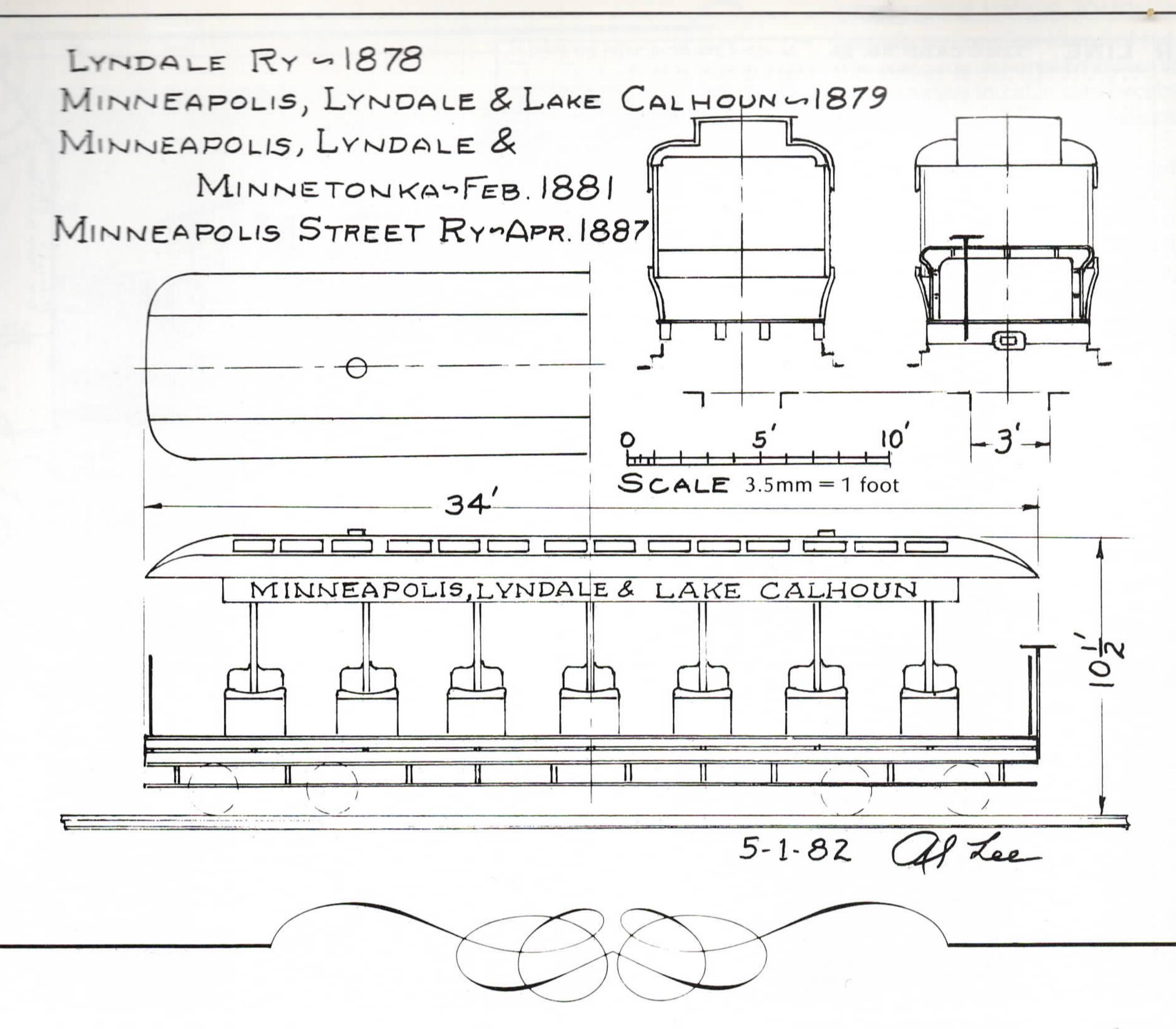


Baldwin Soda Motor #8152, built in 1886 and later converted to steam. Photo, collection of H. L. Broadbelt.

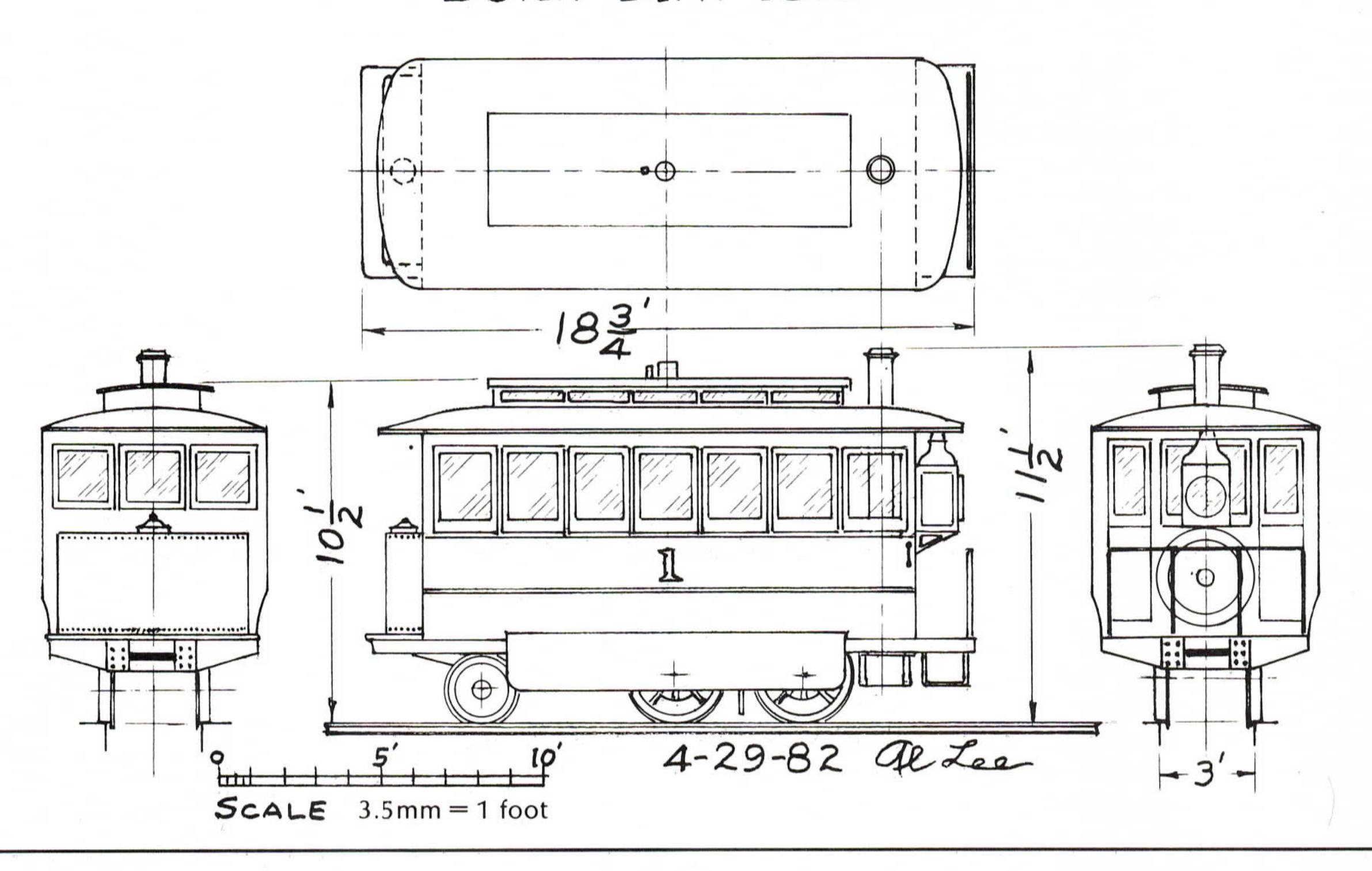


A soda motor chassis built by Baldwin in 1886. The unit had duplicate controls at each end. *Photo, collection of H. L. Broadbelt.*





MINNEAPOLIS, LYNDALE & LAKE CALHOUN #1&2, BALDWIN #4638&4641 10"x12" CYLINDERS, 37"DRIVE WHEELS BUILT MAY 1879



THE MINNEAPOLIS MOTOR LINE ROSTER

Type	Baldwin #	Date	Co#	Cylinders	Drivers	Remarks
0-4-2	4638	1879	1	10" x 12"	37"	
0-4-2	4641	1879	2	10" x 12"	37"	
2-6-0	5694	1881	12	13" x 18"	41"	Originally "Robert S. Innes" became Sumpter Valley #3 about 1893, renumbered #13. Scrapped in 1915.
2-6-0	5695	1881	13	13" x 18"	41"	Originally "Dr. W. B. Hawkes" sold to the Soo Line in 1891. Rebuilt to 4'8½" gauge became their #322, class Z.
0 - 4 - 2	6230	1882	3	11" x 16"	41"	
0 - 4 - 2	6231	1882	4	11" x 16"	41"	
0 - 4 - 2	7606	1885	5	11" x 16"	42"	
0-4-2	7607	1885	6	11" x 16"	42"	
0-4-2	8127	1886	7 —			
0-4-2	8144	1886	8			
0-4-2	8152	1886	9			Originally built as soda motors, rebuilt into steam motors after only four months.
0-4-2	8159	1886	10 —			
0-4-2	8320	1887	11	11" x 16"	42"	
0-4-2	8321	1887	12	11" x 16"	42"	

Notes

One steam motor and four trailers were sold to the Madison Motor Line in Madison, South Dakota.

One steam motor and four closed passenger cars were sold to the North St. Paul Railroad, St. Paul, Minnesota.

Fourteen open trailers were rebuilt into open electric motor cars for the Minneapolis Street Railway in 1892. Their numbers were 555 50 568 inclusive. They were disposed of before 1905.

EQUIPMENT COLORS

Steam motors black with gold striping and numbers, however photos show upper and lower

panels to be lighter.

Trailers bright yellow with a darker trim.

Dispatch car all blue with word "Dispatch" and "#1" in gold.

Freight cars colors not known at this time.

Baldwin #4638 built in 1879 with 37-inch drivers. Photo, collection of H. L. Broadbelt.

INVENTORY LISTS

1887

- 1 locomotive ---*
- 12 steam motors
- 38 passenger cars
- 10 flat cars
- 2 box cars
- 9 dump cars

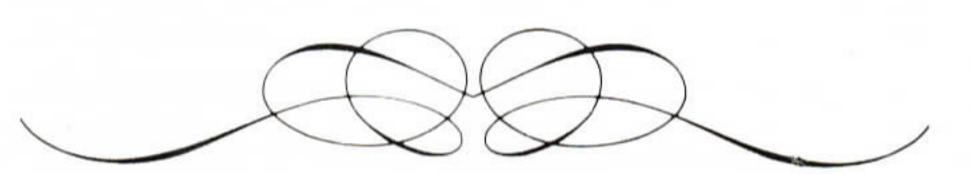
1890

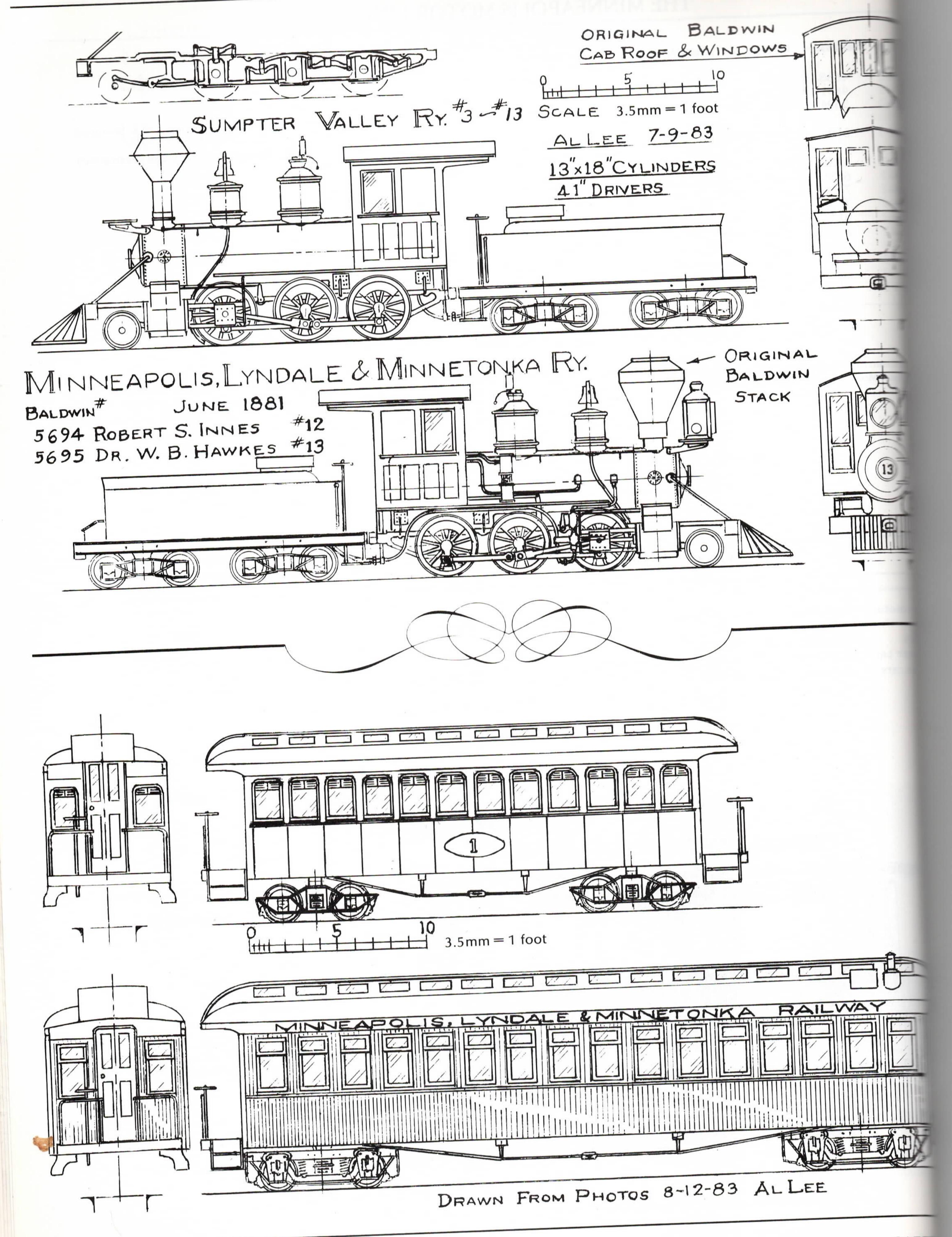
- 2 locomotives
- 13 steam motors --*
- 56 passenger cars
 - freight cars

1891 (for sale)

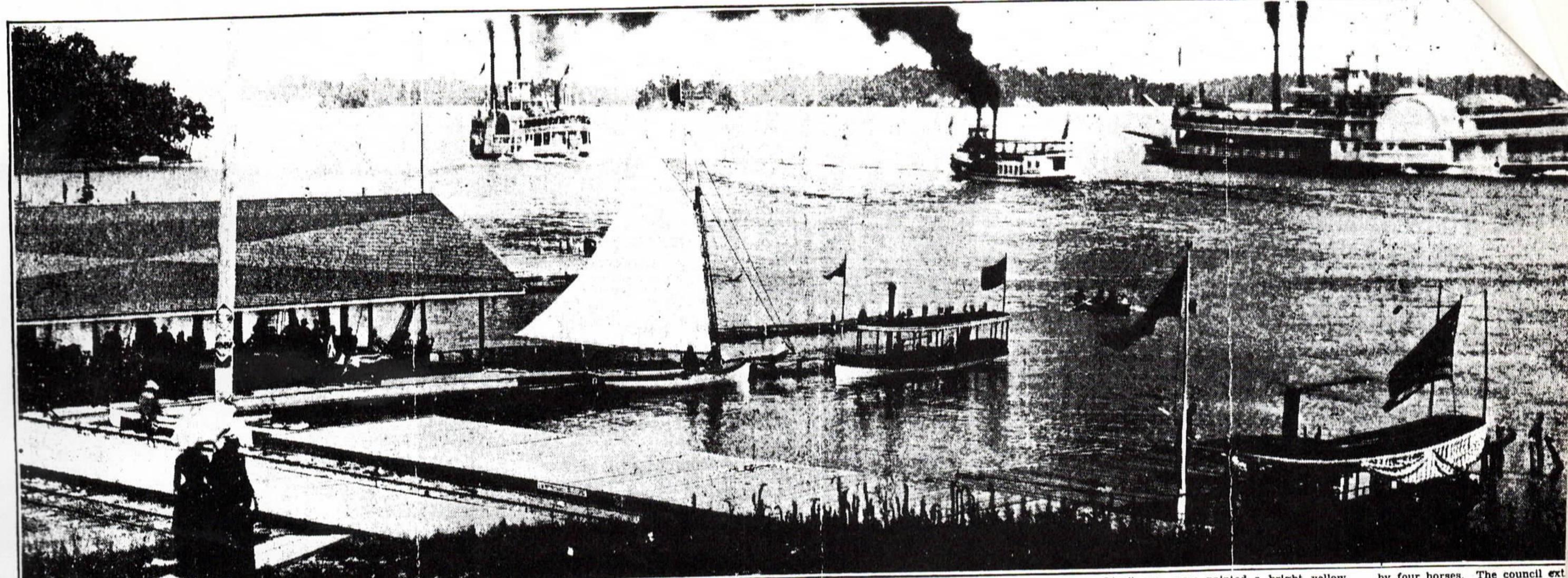
- 2 locomotives
- 12 steam motors
- closed passenger cars 26 to 40 feet long
- 38 open passenger cars 34 feet long
- 8 flat cars 30 feet long
- l dispatch car 24 feet
- 1 caboose 24 feet long

^{*}Appears to be in error.





Steam Trains on Nicollet Ave



How long have you lived in Minneapolis? How far back can you remember? If you are 50 or more
years old and have lived all your life here
then you will remember the famous "Motor Line." If you never heard of the "Motor Line" then you surely are a newcomer.

It may seem unheard of to you that as late as Aug. 19, 1890, steam trains operated on the down town streets of Minneapolis. Yet the "Motor Line" played a really important part in the early development of the Eighth, Twelfth and Thirteenth wards, in fact the whole area bounded by Fourth S., on the east, Twenty-sixth street d Lake Calhoun on the west.

bar as and a cot-

There was great rejcicing in Minneapolis one summer day in 1879 when the first motor train tooted its way out First avenue S., and Nicollet to Lake Calhoun. It was really a railroad being built and opened for traffic on a shoestring. Colonel McCrory had no financial structure back of his enterprise and from its inception the road was usually just one lap ahead of the sheriff. The narrow single track was of the ordinary exposed construction of light "T" iron rails weighing 35 pounds to the yard. The joints were uneven and the rails were held together with old fashioned "fish plates." The first equipment was primitive. It consisted 1 and 2 and closed

At the End of the Ride on the Steam Street Railway

Fifty Years Ago "The Motor Line" Was Puffing Up and Down Our Business Streets — It Was the Great Builder of the Eighth, Twelfth and Thirteenth Wards of Today

By Arthur W. Warnock

'y turned tend the line from L'

'd Exsior. He bought

Line" cars were painted a bright yellow, the Motors black with gold trimmings. Cars were coupled together, and to the Motors, with old-fashioned link pin couplers.

There was one Express or package freight car on the road. It was painted a sky blue and on each side, in large golden letters was the one word "Despatch." This solitary package freight car was operated between Nicollet avenue and Twenty-ninth street, where the line had a connection with the Milwaukee Road, and Excelsior. But the lonely little car did little, if any, business.

Colonel McCrory now thought the time was ripe to put an excursion boat on Lake Minnetonka to take care of his Motor

by four horses. The council ext extended the time for Colonel 1 stop his steam trains but still t motored. Poor Colonel, what con What other power was there? had been extended out Nicollet seventh street and thence to Falls in 1885 and also out Nicolie burn park at Fiftieth street. had been moved from Lake Thirty-first street and Nicollet. new passenger cars were brough east and put in service and to three of these long cars in a tr along First avenue S. or Nico see the last word in passenger an days. The aver-



A Minneapolis, Lyndale & Lake Calhoun Railway steam motor with train, north-bound nearing 31st Street, Minneapolis, Minnesota, in 1879. Photo, collection of the Minnesota Historical Society.

Top photo:

The end of the line at Excelsior. This photo was taken from the October 4, 1931 editorial section of the Minneapolis Journal. Photo, collection of Albin Lee.

Calhoun. Also in 1887, the city council passed an ordinance prohibiting steam within the city limits as of November, 1889. This sounded the death knell for the little motor line. The last steam motor ran from 1st Street to the 31st Street junction in August of 1890.

Information on this line is very scarce. The Broadbelt collection has several builder's photos of the original steam dummies and the soda motor. However, there are no photos of the Moguls. I contacted Mallory Hope Ferrell and he provided a Baldwin

erecting card for their locomotive #5694 plus a photo of it in use much later as #13 on the Sumpter Valley line. This information allowed me to make the drawing of this locomotive. Since there were no data available for the tender I used a D&RGW class 42 and 42½ tender as being representative of Baldwin 1881-1883 tenders.

I am looking for photos of the "Dispatch" car, the caboose, and the Mogul in service in Minneapolis. If anyone out there has information you may contact me in care of the **GAZETTE**.

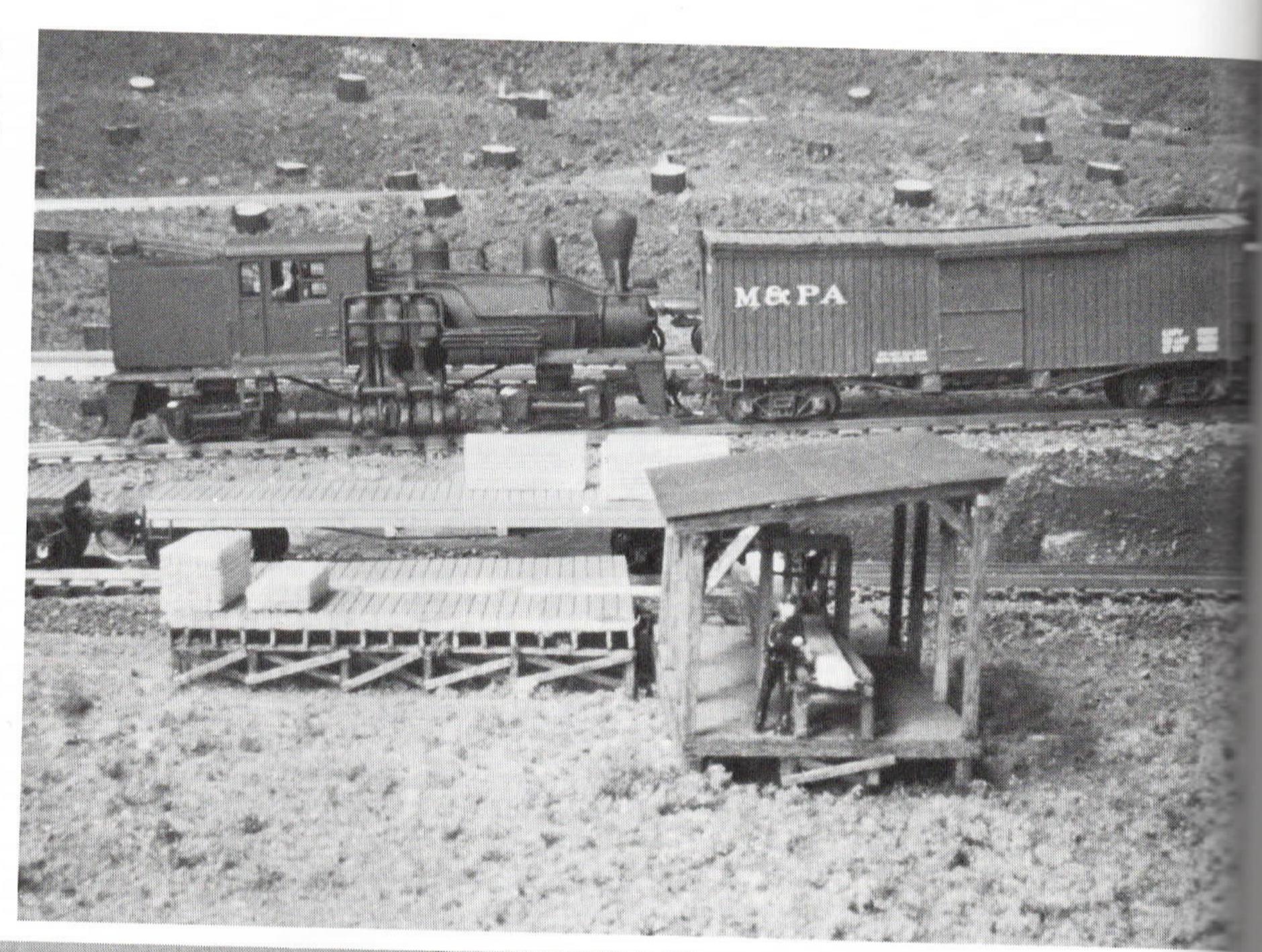
THE N GAUGE SHAYS

by Bob Brown Photos by Wilbur Epperly

Wilbur Epperly sent in these photos of his excellent little scratch-built N gauge Shays. Wilbur builds in brass and uses 30-30 brass cartidges and more recently, 264 Winchester magnum shell casings for his boilers. The steam and sand domes, and the stack and cylinders are brass lost-wax castings made by Wilbur. The Shays are powered by a motorized caboose; an Arnold Rapido wood caboose fitted over a diesel power truck. The photos show Wilbur's Shays in a variety of poses on his N gauge layout.

An N gauge Shay pushing a box car past a small sawmill.

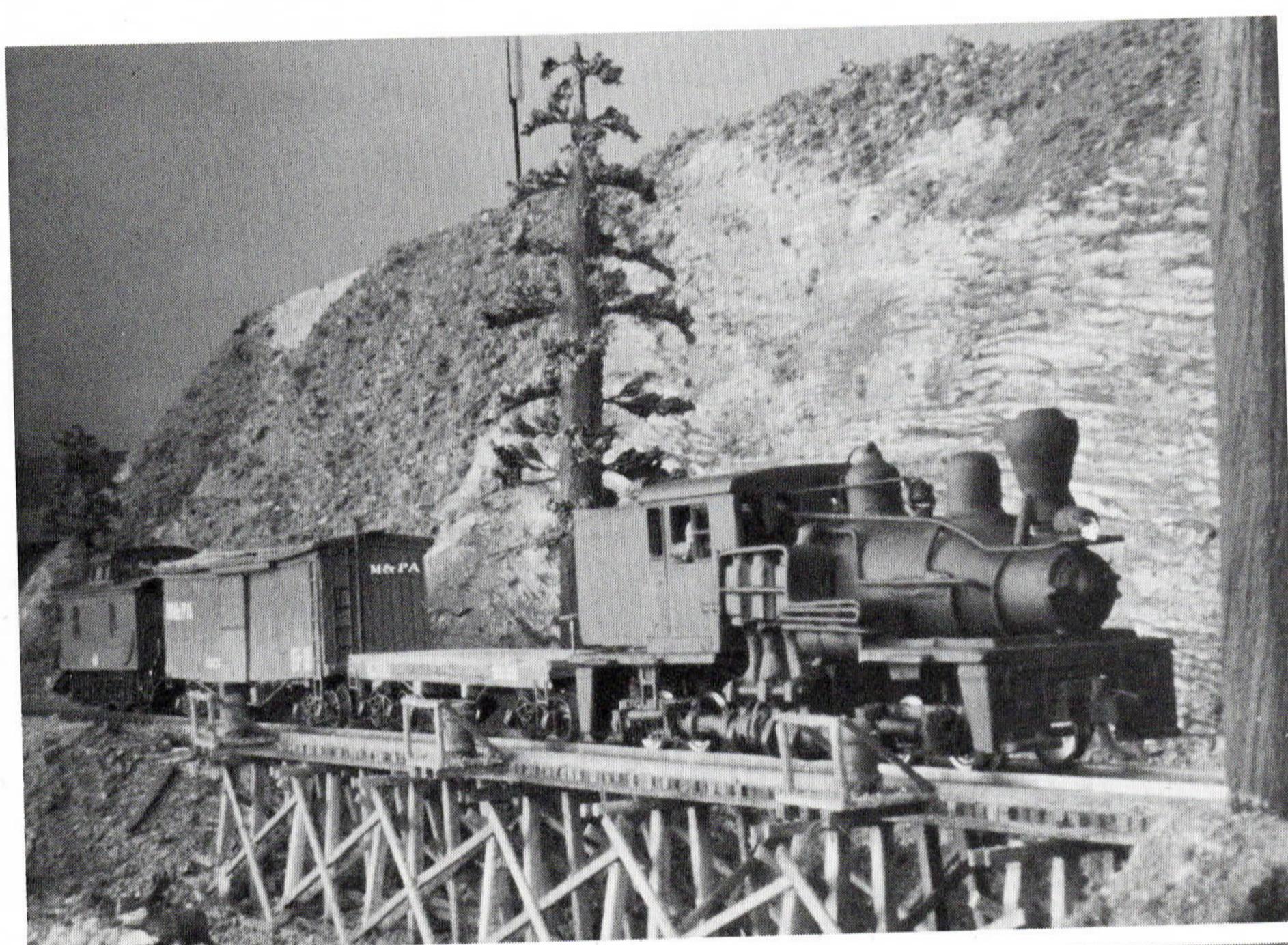
A three-truck N gauge Shay crossing a low trestle.





WILBUR EPPERLY, JR.



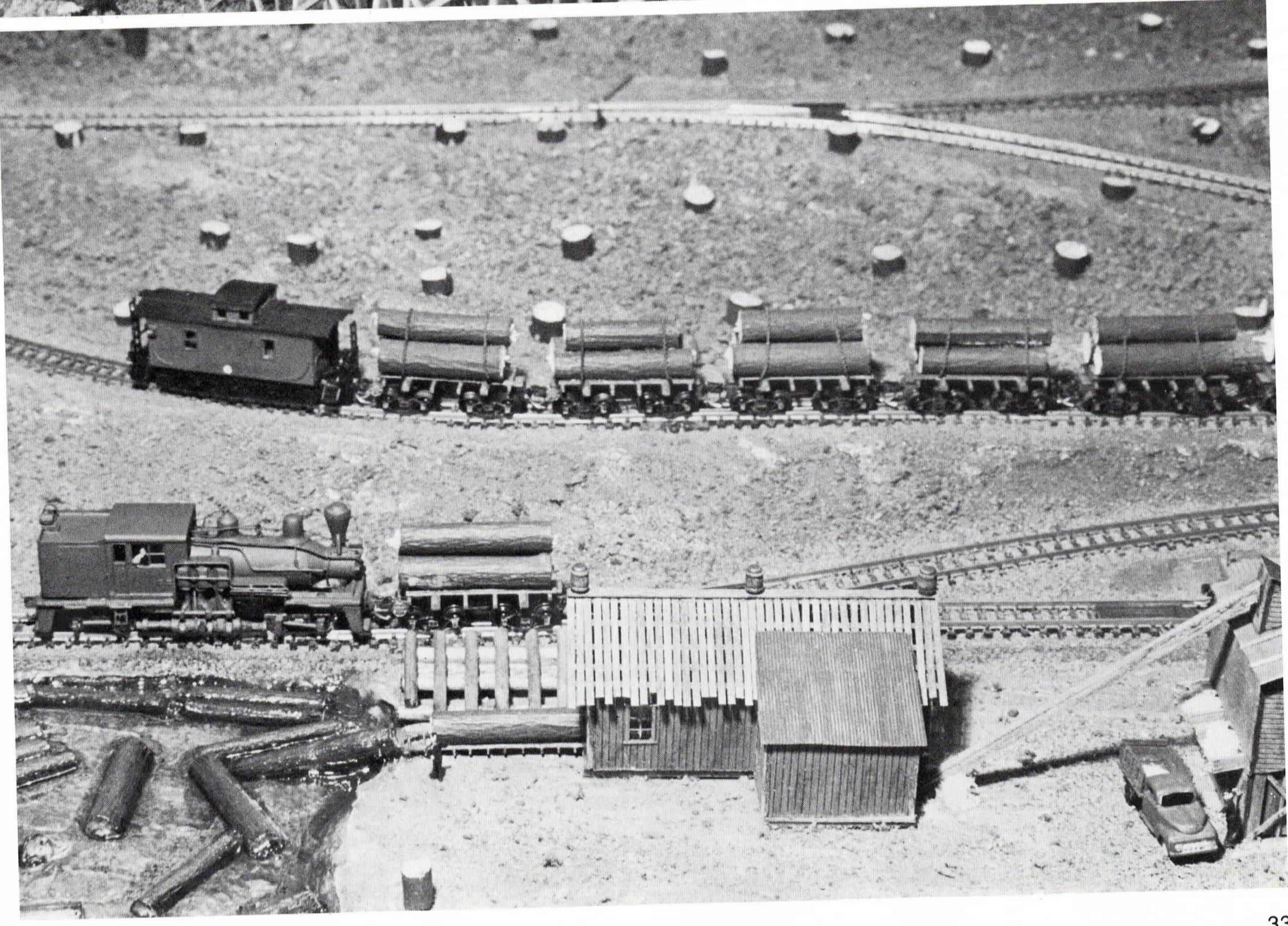




Battling up-grade into the woods on Wilbur's N gauge logging line.

This short N gauge freight is powered not by its engine, but by a caboose which contains a diesel power truck.

A powered caboose usually used to power an N gauge Shay is pushing a string of log cars all by itself.





LIVE NARROW GAUGE ACTION!!!

VIDEO **TAPES**

ON THE SPOT, REAL ACTION FOOTAGE SPECTACULAR COLOR & FULL SOUND

ROTARY WORKOUT

Exclusive 37 minutes of live action starring the Cumbres & Toltec Rotary Snowplow

EARLY FALL ON THE COLORADO NARROW GAUGE

43 minutes of super action! Includes the Cumbres & Toltec, Durango Silverton, and George Town Loop roads \$49.95

STEAM DOUBLE HEADER TO CUMBRES

32 minutes of romance and action pacing the Railfan Event on the Cumbres &

SLIM RAILS TO SILVER PLUME

35 minutes with intimate views of the spectacular George Town Loop. Shots never seen before \$39.95

ZIVIVI VISINI PRODUCTIONS

ORDER TODAY

All prices plus shipping Check . C.O.D.

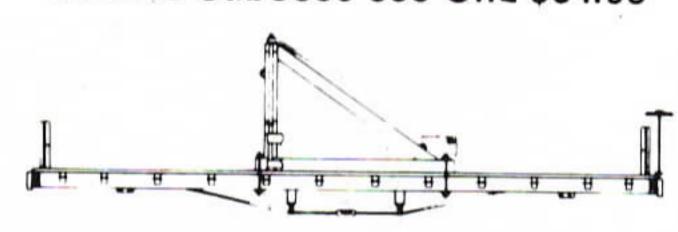


P.O. BOX 6391 • LAWTON, OKLAHOMA 73506-0391 • (405) 357-8558

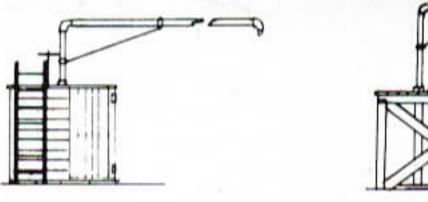
TWO-FOOT MODEL RAILROAD KITS



SR&RL Caboose 555 On2 \$34.95



Monson Snow Spreader Car On2 \$16.95



NEW IN HO AND O SCALES:

Phillips Watercrane Farmington Watercrane Kit B-17 Kit B-18 In O Scale \$18.95 In O Scale \$18.95 In HO Scale \$14.95 In HO Scale \$14.95 Both kits feature brass castings by

Postage/Handling: 10% orders under \$20.00 5% orders over \$20.00

Portland Products.

Mass. Residents please add 5% Sales Tax. Send \$1.00 for either HOn21/2 or On2/O scale catalogs.





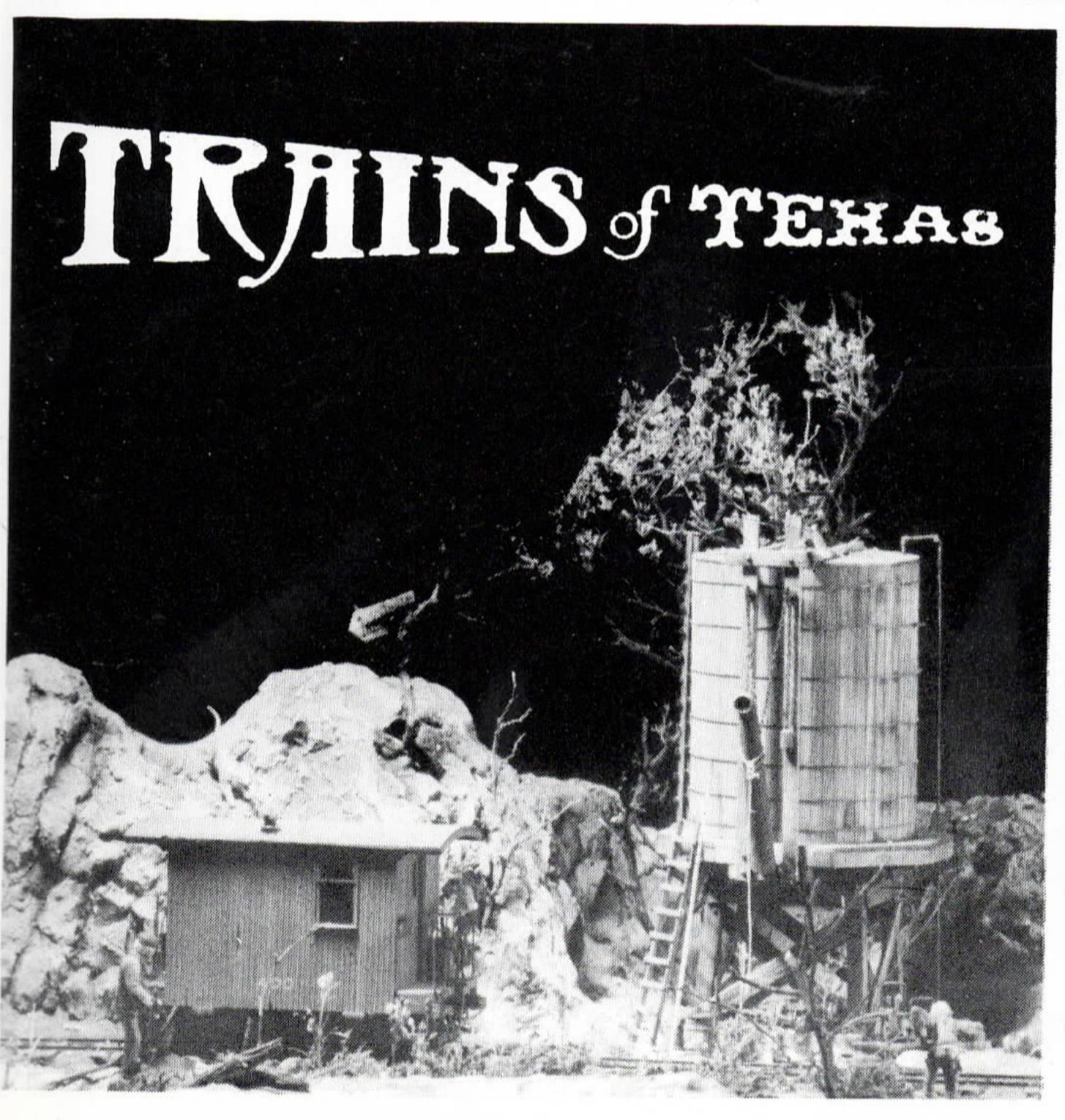
New! in HOn21/2/HOn2

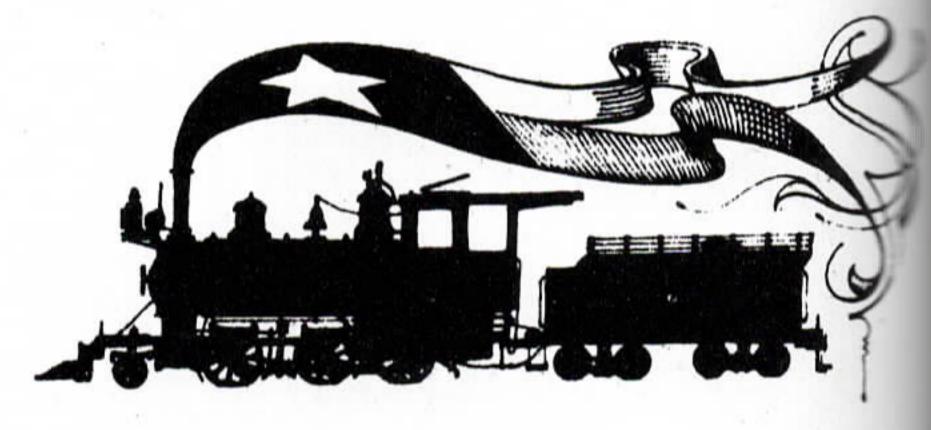
SR&RL Lowside 430 \$9.00



HOB 5 Strong Creamery \$29.95

SANDY RIVER CAR SHOPS P.O. 573, South Dartmouth, Mass. 02748





SHORTLINE AND LOGGIN WATER TANK KIT. TW VARIATIONS WITH BROMMER GRANDT AND KAPPLER PARTS

TEXANS PLEASE ADD 41/8 PERCE

会 5 - \$ 36.95 ...\$1.52 HO - \$ 25.95 ···\$1.07 Y'AL ADD\$ 2.50 SHIPPING/HANDLIN Y'AL ADD \$ 2.50 SHIPPING/HANDLINE

> TRINS of TEXAS 10606 SAGEWIND

HOUSTON, TEXAS . 77089



"SHIPPING POINT"

850 S/N

IMAGE SIZE 193/4" x 32"

\$120.00

STAR ROUTE BOX 241 Gary MERG

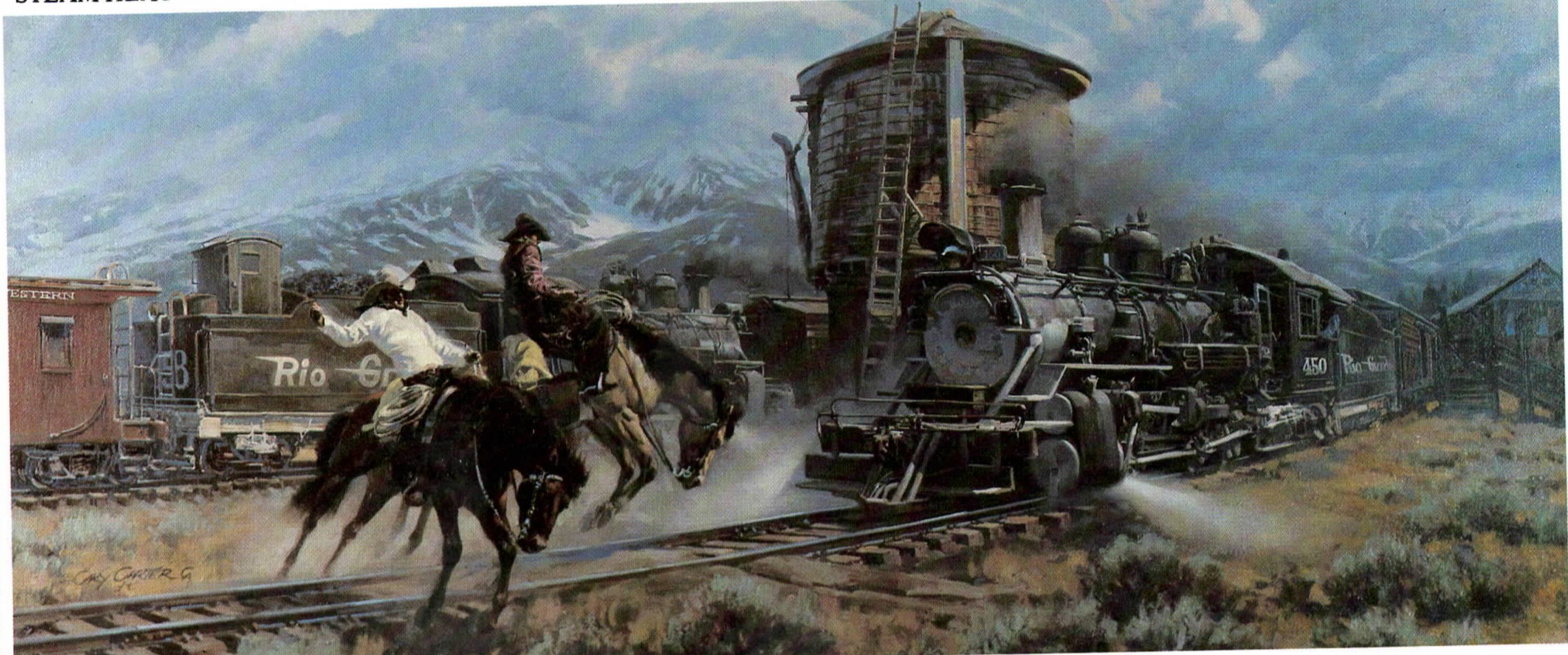
WEST YELLOWSTONE, MT 59758 406-646-7744

"STEAM HEAT"

850 S/N

IMAGE SIZE 141/2 " x 32 "

\$120.00





EAST TENNESSEE & WESTERN NORTH CAROLIN HOPPER CAR

by Julian Cavalier Model photos by the author

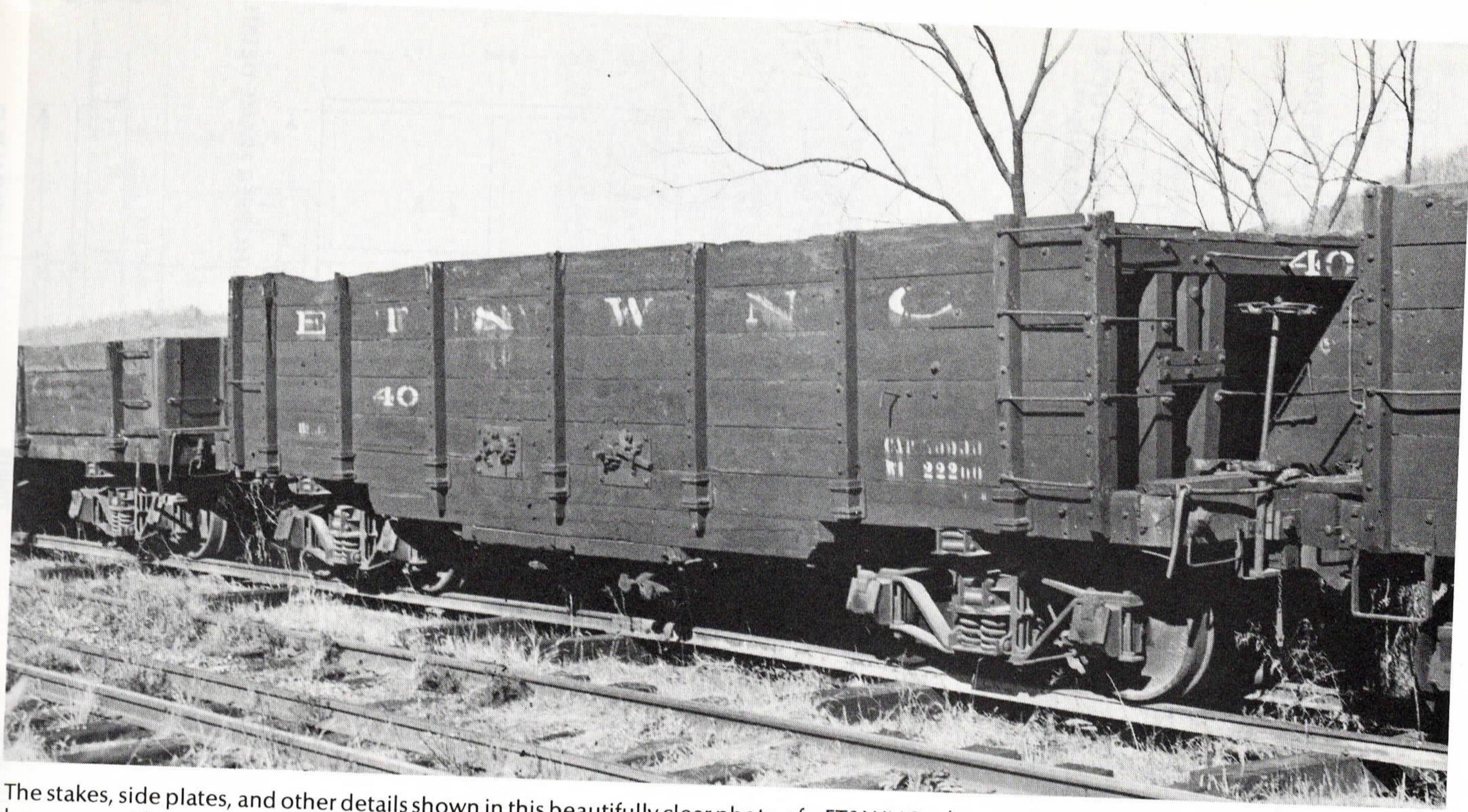
This is the second of four articles describing how to scratch-build an ET&WNC freight train. Detailed plans for the four cars discussed in this series appeared in the July 1981 MODEL RAILROADER. My drawings are working plans which will allow you to build the cars but you may want to refer to the MR plans for details. I have dimensioned the plans in feet and inches so they can be used in any scale and gauge.

I began my hopper car by making the underframe (figs 1, 2, 3, and 4) from $4\frac{1}{2} \times 9$ inch scale strips of basswood. First, I cut the 27-foot long side sills and the 7-foot long end sills. I glued these parts together and pinned them for added strength. Two $4\frac{1}{2} \times 9$ inch strips were cemented together for the center sill and cemented in position between the end sills as shown in figs 1, 3 and 4. Four cross frame strips (fig. 1) were cut from the sill material and glued in place between the side sills and the center sill.

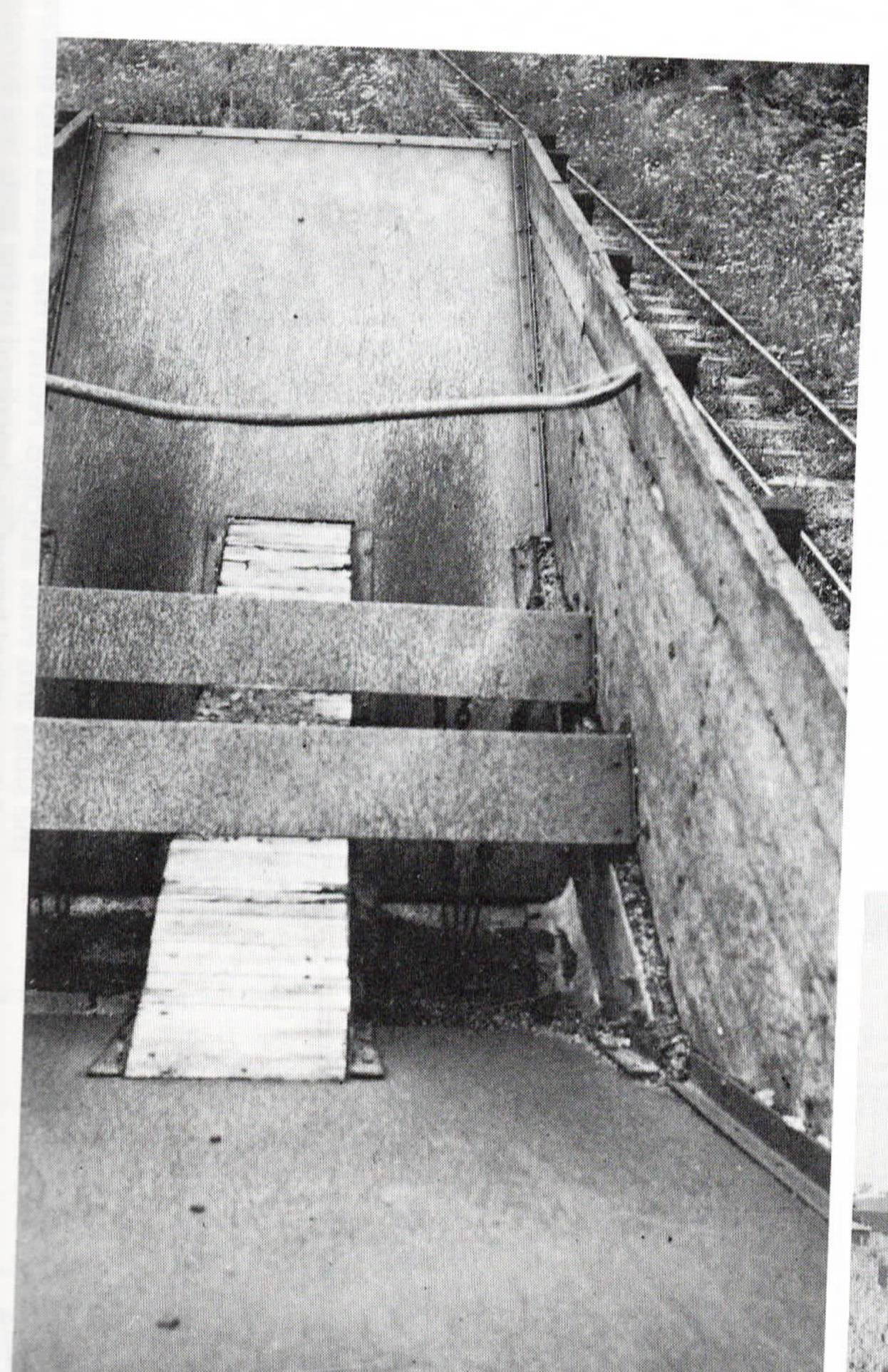
Next I framed the opening of the center hopper. Four 10-foot 4-inch long pieces were installed between the end sills and the hopper frame at each end of the car. The short cross braces were added as shown in the drawings.

Fig. 5 shows the shape of the body bolster and figs. 6 and 7, the shape of the end buffers and the coupler pocket side boards. I made the two buffer end plates as shown in fig. 10 out of styrene and glued them in place. Two #58 holes were drilled in each plate to allow me to add Grandt Line #1082 NBW castings.

Next I turned the frame over and started working on the sides and ends as shown in figs 11, 12, 13, and 15. I began by cutting ten strips of scale basswood for the car sides, and distressing them. Then I assembled them into the sides, using five boards to a side. I joined them at the ends with cross braces (figs. 12 and 14), two per end,



The stakes, side plates, and other details shown in this beautifully clear photo of a ET&WNC hopper car. *Photo, collection of Ed Bond.*

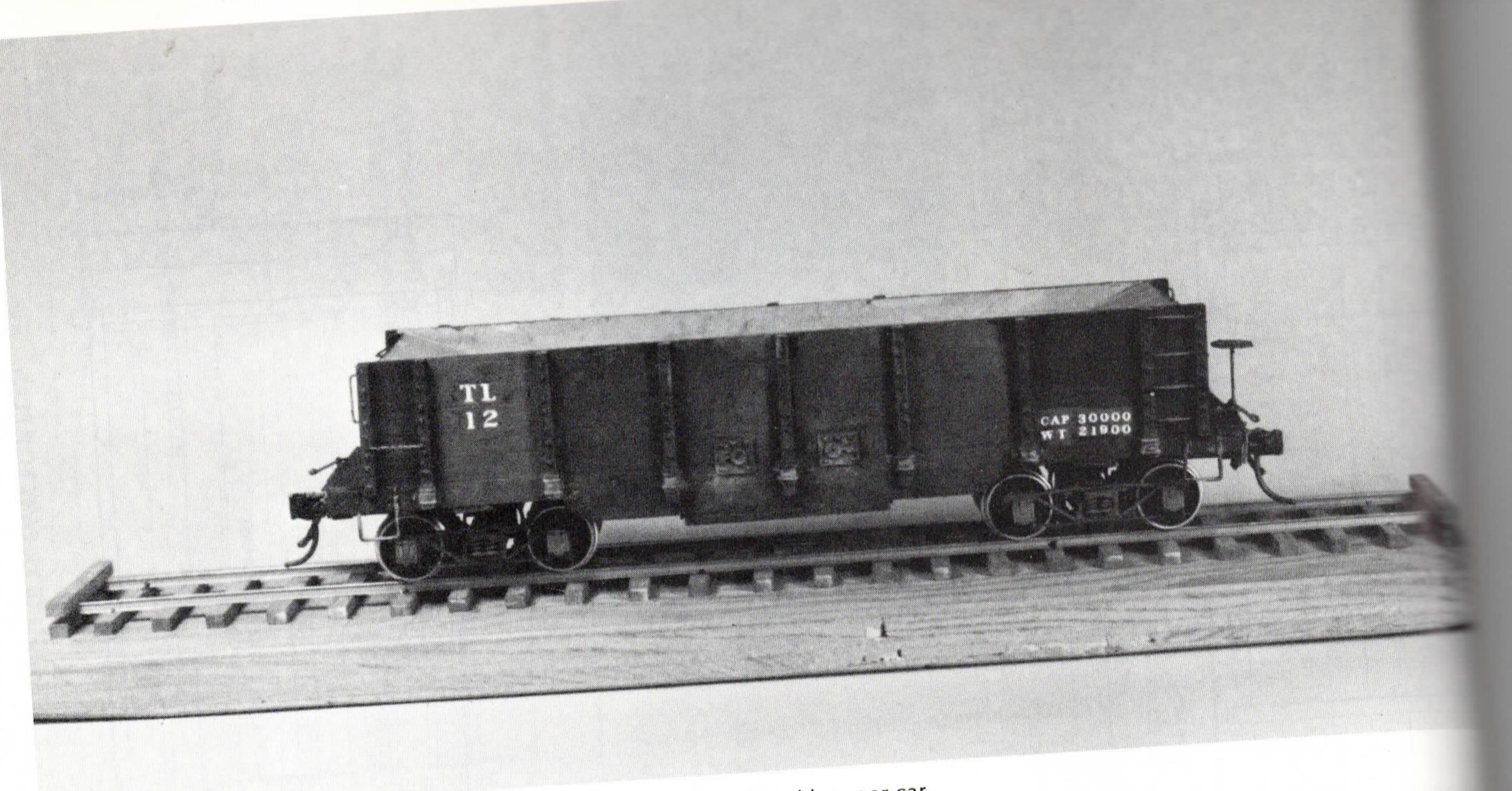


This end view of an ET&WNC hopper shows the interior bracing, long hand grabs, end buffers and NBW detail. *Photo, collection of Ed Bond.*

supported by the closely spaced vertical braces shown. The paired cross braces were cemented to the vertical braces and, when dry, cemented to the sides (fig. 14). Note that the cross braces are set in about four scale inches from the end and down about three scale inches from the top of the sides. I test-fit the body on the frame making sure all was square. Note that on each end, one of the vertical braces rests on the center sill and the other needs a little filler strip as a resting point.

When everything fit, I cemented the ends and sides to the underframe. I could not determine whether the prototype cars had floor boards under the sloping body of the car at each end so I left these floor boards off my model. I could also find no brake cylinders or brake detail other than the hand brake wheel and shaft. The

The inside detail of an ET&WNC hopper. Note the boards covering the center sill, the metal cross braces and the metal sheets covering the sloping floor. Photo, collection of Ed Bond.



The completed hopper car.

prototype did have two floor boards at the very end of the car (figs. 11, 12, and 13). When the sides and ends were thoroughly dried I beveled the tops of the paired cross braces with sandpaper so the sloping floor would fit better (fig 14). The sloping floor boards were cut to length as shown in figs 14, and 15 and glued to the cross board before I cemented the sloping floor in place. Two pieces of 3 x 6 inch by 15-inch wood were fitted between the vertical braces at each end of the car. Two pieces of .005 inch styene about 20 inches long were glued vertically (fig. 12) behind the brake staff. Number 1009 NBW's were added at each end of these strips. Number 16 NBW's were added to the end sills.

Fig. 8 shows the detail of the hopper frame. I did not cement the hopper frame in place until I fitted a 6 foot 2 inch strip on the center of the center sill, using the hopper frame as a guide. A piece of .005 inch styrene formed the hopper box cover. I

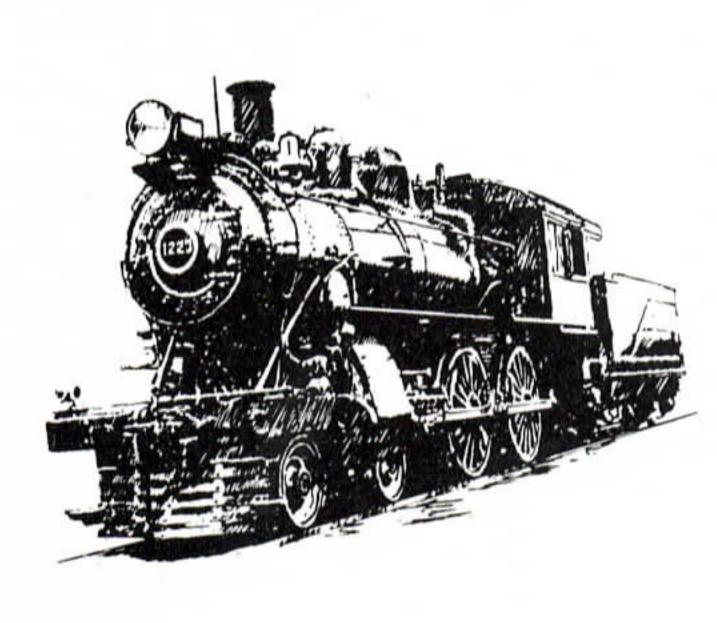
cemented it over the hopper frame brace on the bottom of the hopper where the hopper frame would go. The two hopper box ends were closed with 1 x 12 strips of .005 styrene. Cementing the hopper frame assembly on top of the hopper box gave the effect of having four hopper box doors.

I used Grandt Line #17 60-inch stakes in stake pocket castings, lined up along the side sill of the car. I trimmed the stakes flush with the top of the sides and then cut off the ends of the stakes which were sticking out of the botton of the pockets except for the bottoms of the center stakes which extend down below the stake pockets in the prototype. The last stake on each end does not have a pocket and is used to attach one side of the grab irons. I used a cast #17 stake with the pocket cut off. The bottoms of these stakes were slightly beveled.

The grab irons are .016 wire for my O scale model. I added stirrup steps and other

details from a Grandt Line #3022 brake for my brake detail. There is a mount plate in the brake set that can be cut in and used for the plates on the sides of car. I added NBW details to the plates glued on a ratchet and pawl to comthe plate detail. Two of these plates glued to each side of the car as shown in photos. My coupler lift bar is held up medium sized Grandt Line #1108 bolts and I used a Grandt Line brake whe added the coupler draft gear box couplers, next followed by the air hos and Grandt Line #3077 archbar trucks complete the model.

Most of the ET&WNC hoppers un painted black with white lettering numbers. I painted my car with Floqui Instant Weathering followed by Flat Bla and touched up the metal parts with R The couplers on the prototype were sen standard gauge height so you may want alter your coupler height.

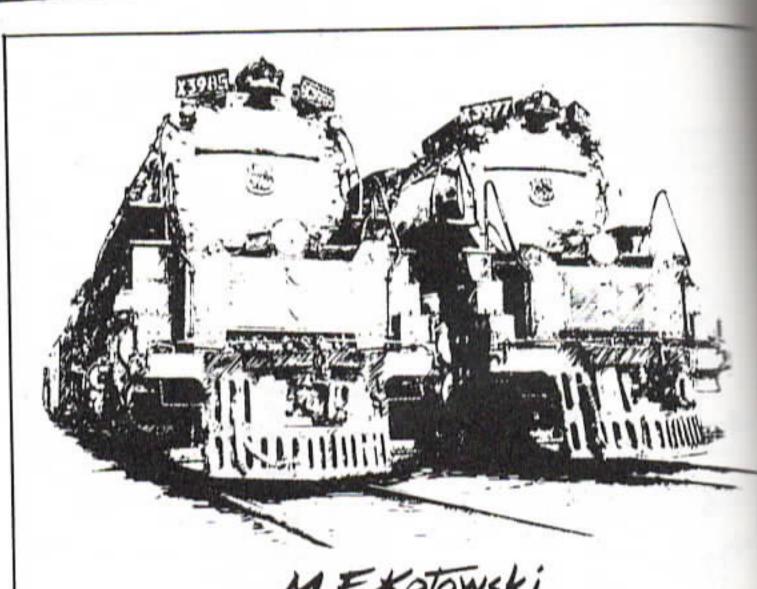


...from the Atchison, Topeka & Santa Fe to the Western Pacific... send \$2.00

NEW!!!

The M.F. Kotowski catalog of fine art is now available. This comprehensive brochure lists all of the new Signature and Masters Series prints that are available. Included are rates for original art work by this internationally known illustrator.

M.F. KOTOWSKI RAILROAD ART 21 North Harrison Ste. 200-B Campbell, CA 95008



RAILROAD ART

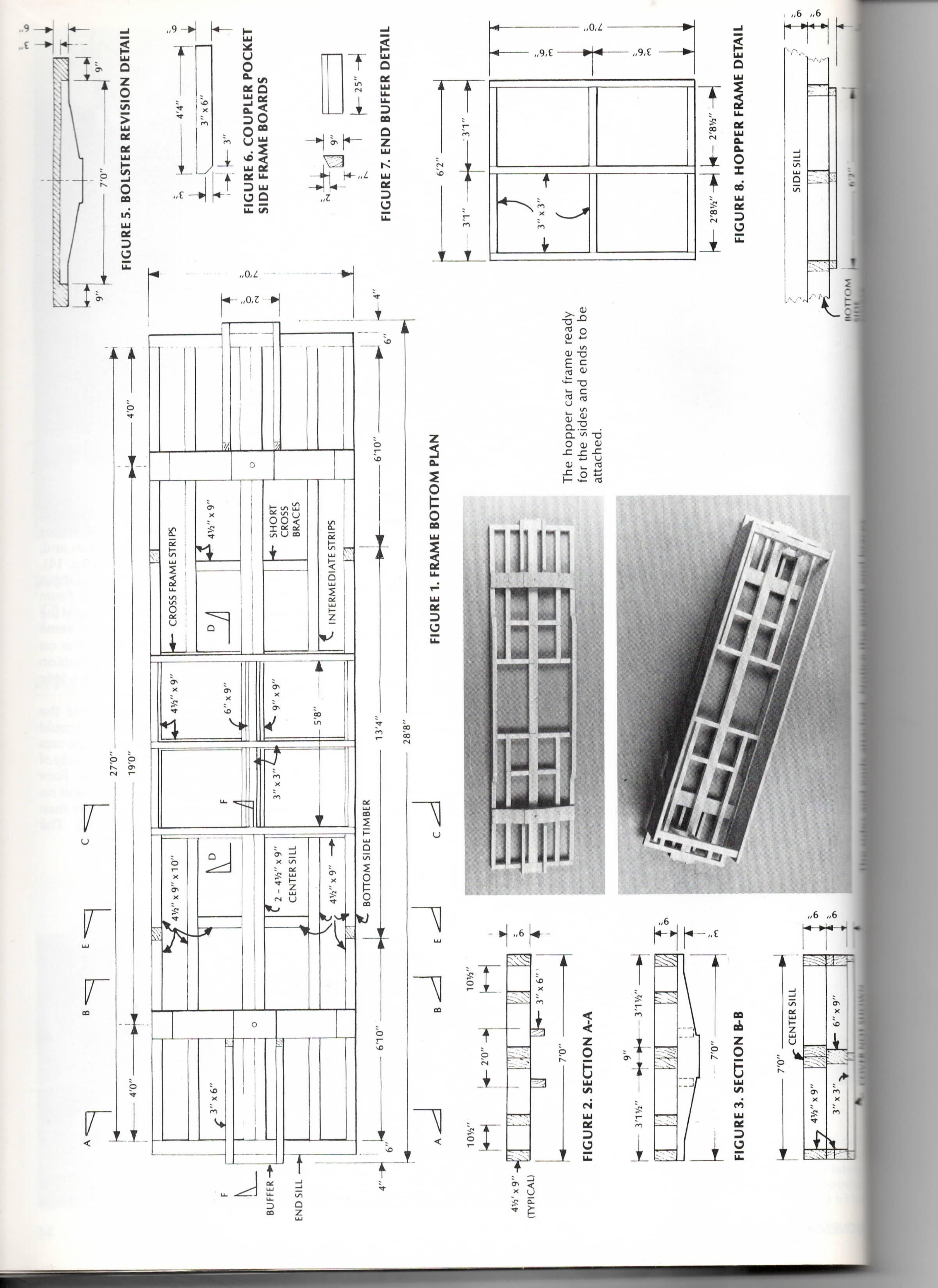
Presenting the IROS HORSE in full regular rendered by noted radioad artist Michael F botowski. Icotowskis art offers a select line of painting and illustrations profracing the steam locomotives of Sorth America. Represented in private and public collections world sade. M.I. Kotowskis sumatured art has appeared on numerous book covers and in many technical publications. Although this catalog deals with reproduced prints, both limited and open editions, original art and commissioned originals are available by con-

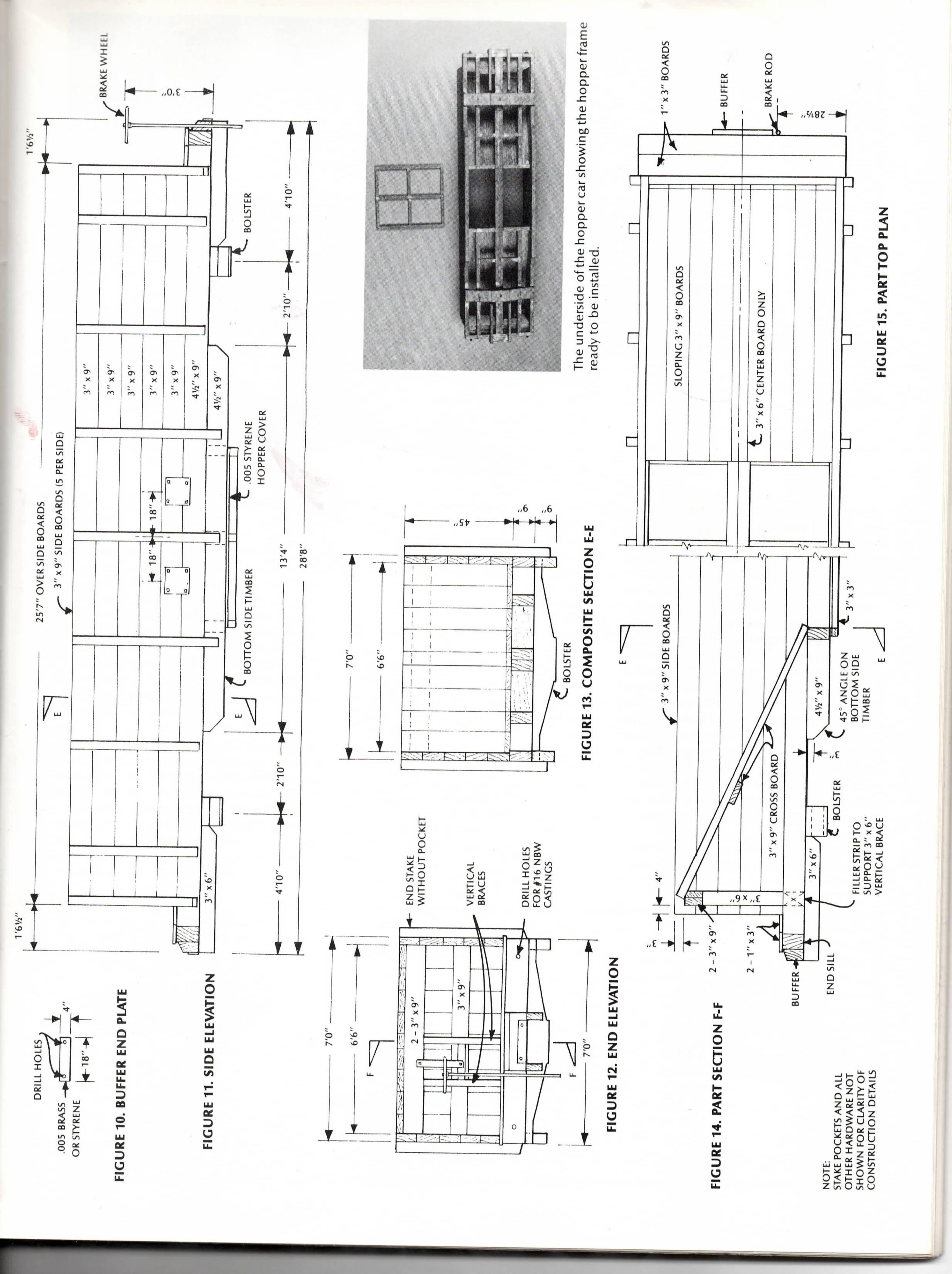
taction the artist Commissioned illustrations in oil or acrylic are sized minimum 20X26 menes and

Mixed mediums (wash and studio colour or other) sized 10X12 inches minimum are

Colour pencil illustrations with a minimum size of 15X20 inches are priced from

 Ebony pened or pen and ark illustrations with a minimum size of 15X20 inches are prived from \$150 oo







I wanted the backdrop on my small HO gauge trolley line module to depict the downtown and business sections of a typical midwestern U.S. city of the 1930's. I suspect that most **GAZETTE** readers are not building trolley lines but I feel that the methods I used to create the city-scape for my little trolley would be of interest to you anyway. These techniques could just as well be used to create a city-scape in Black Hawk, Durango, Nevada City, Farmington or Orbisonia.

I had to compress my city backdrop to provide a typical cross-section of business, residential, and recreation areas. I also had to shrink the size of the blocks. On my module the backdrop of buildings is divided into four city blocks with the two end blocks being only the corners of blocks. This created three streets that start and end in a matter of inches. This also created a problem in how to end these short streets in a visually acceptable fashion.

I considered pre-printed backdrops but discarded them for several reasons. First, I couldn't get one for the city I was modeling (Colorado Springs). Second, I wanted a backdrop that was different, and third, I couldn't get a pre-printed backdrop that established the time period as the 1930's.

In researching my old buildings, I discovered that the Penrose Room of the Colorado Springs Public Library contains a treasure of old original photos of all types of scenes throughout that city. I searched through these photos looking for the views

CREATING A SPECIFIC TIME PERIOD USING PHOTO BACKDROPS

by Danny M. King Photos by the author



I needed; two photos showing buildings at 90 degrees to the street and one showing a view at 30 degrees from the right side of the buildings. In searching, I discovered that there were very few views of buildings taken at right angles. Most of the photos had a shallow angle, and there were very few photos showing buildings at the end of streets. However, I did find a photo of the Antlers Hotel in Colorado Springs, at the end of Pikes Peak Avenue with Pikes Peak in the background, at the horizon line. This building is so typical of Colorado Springs that I used it in my backdrop. Since most streets are photographed at a shallow angle I had many scenes to choose from for my 30 degree photo; I selected a photo that had circa 1930 cars in the forground.

Once you have selected your photos, most libraries can have prints made for you. One problem with the old large glass plate negatives is that they must be contactprinted actual size. Regular negatives can of course be enlarged or reduced to fit your scene. If you are searching for backdrop photos in your local library, keep this in mind. (Editor's note: I checked with our local Palo Alto library and found that they have a collection of over 1500 old photos showing historic buildings from our area; only a few of these are from glass plate negatives.) Some libraries will allow you to make your own photocopies. Whatever you do, treat the originals with respect so that future researchers will find the collection in good condition.

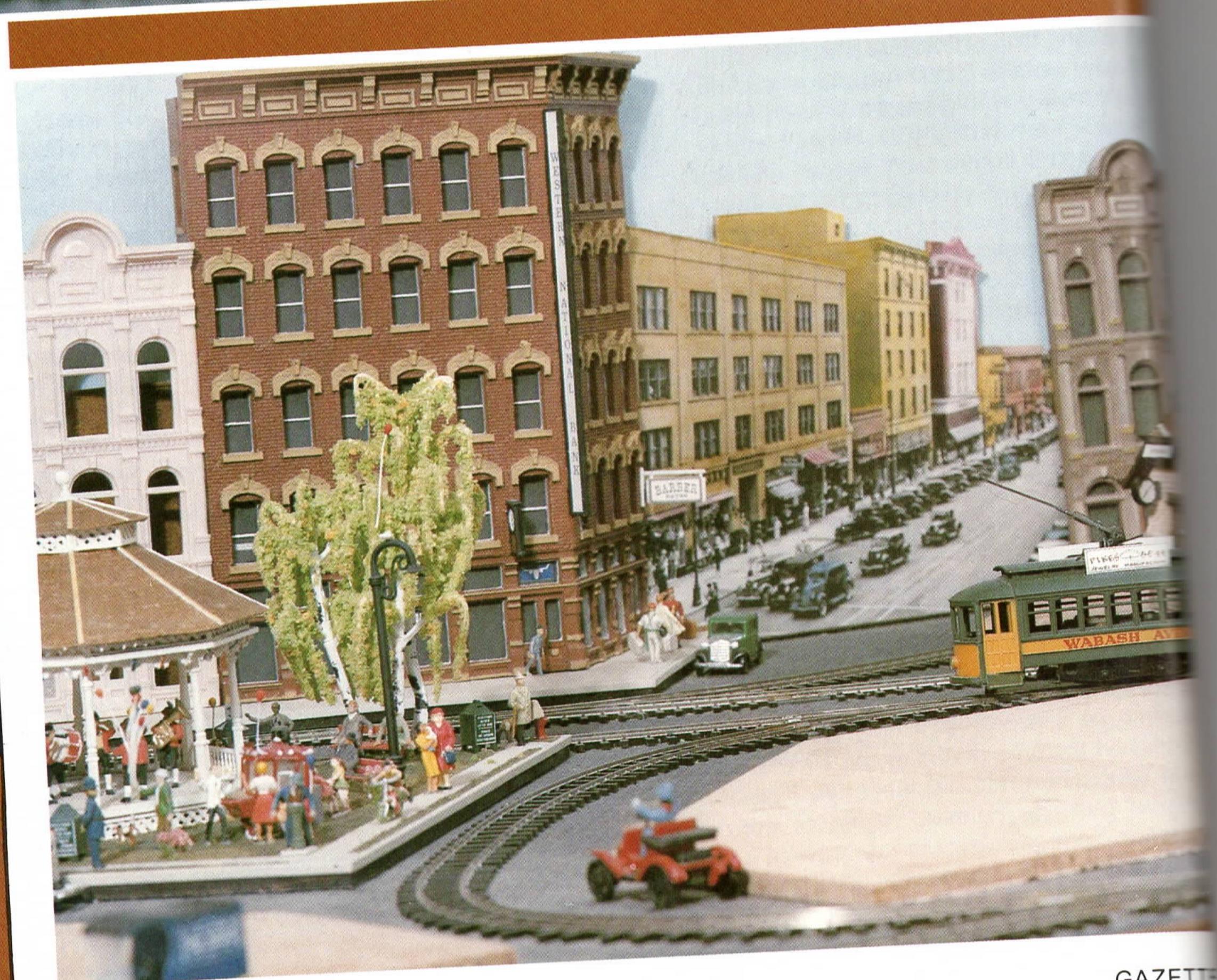


A hand-colored photo of The Antlers Hotel in Colorado Springs is perfect to end this street.

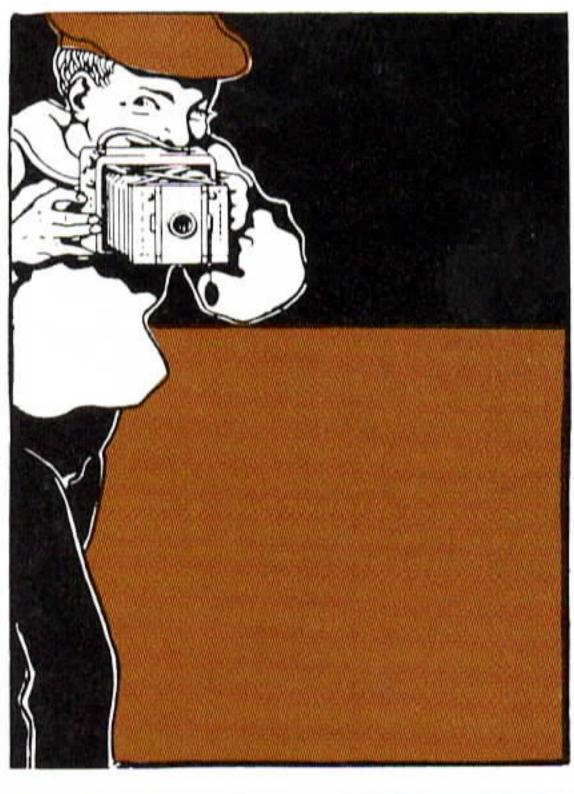
The background photos in this scene were taken at a shallow angle and work well in the backdrop.







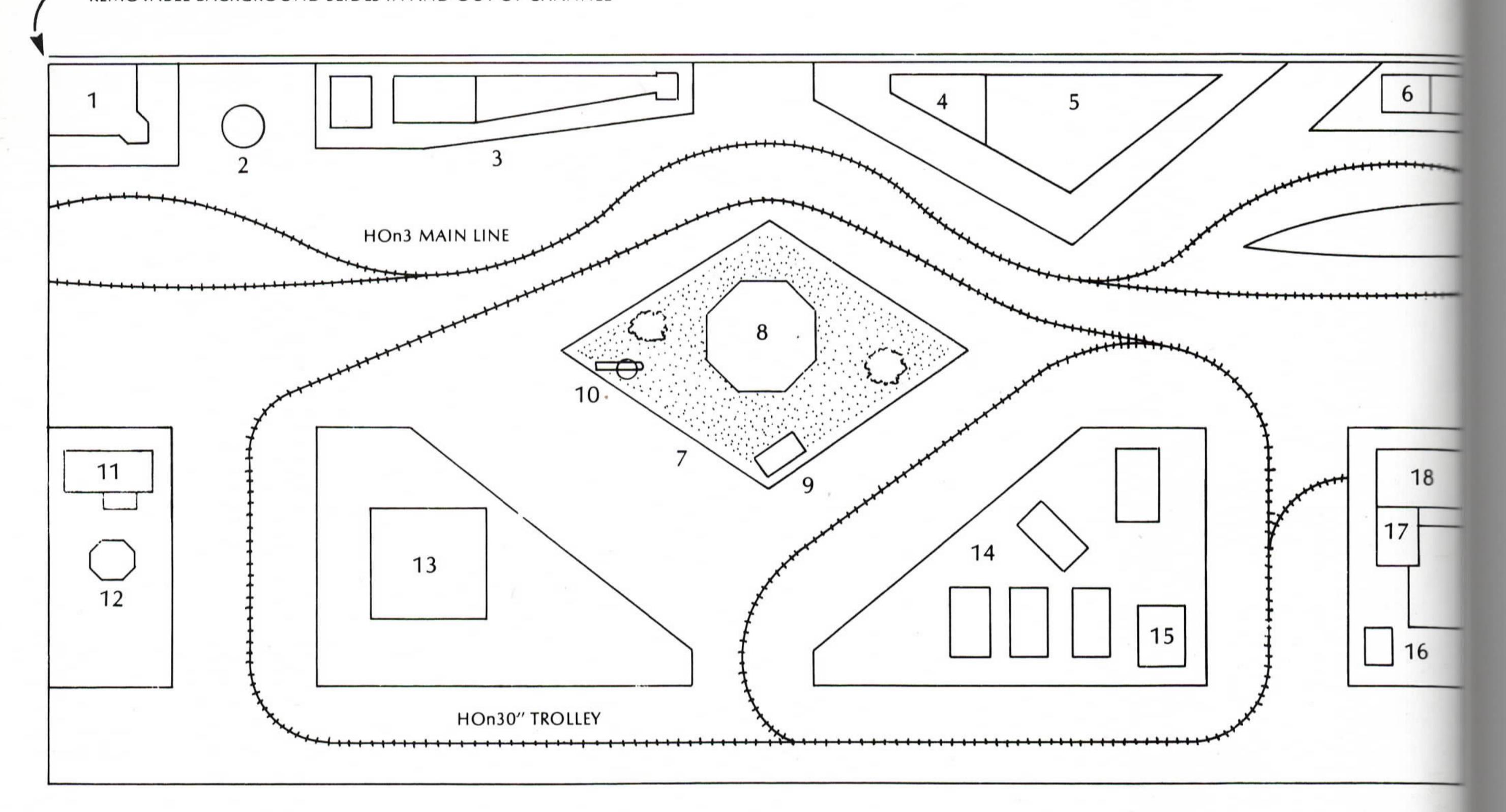




The thickness of the masonite backdrop board was allowed for so it could slide up and down in the back of the module. Notice how the photos have been attached to the masonite to create the street scenes.

An overall view of the author's HO trolley module, showing the effective use of his hand colored photo backdrop.





LEGEND

- 1. PILSNER'S DRUG
- 2. BOB WOMACK STATUE
- 3. BUSINESS DISTRICT
- 4. OFFICE BUILDING
- 5. ACACIA HOTEL
- 6. TOWN HOMES
- 7. TROLLEY PARK
- 8. CAMPBELL BANDSTAND
- 9. POPCORN VENDOR

- 10. CANNON
- 11. CHURCH
- 12. GAZEBO
- 13. MANSION ALEXANDER
- 14. MINER'S ROW
- 15. WHITE CASTLE
- 16. GOOD NEWS STAND
- 17. POLA BREWERY
- 18. TROLLEY BARN

I had not quite settled on the photos I liked when Wally Smith, an avid photographer and good friend of mine, showed me some color slides he had taken of the capitol building in Cheyenne, Wyoming. The photos had been taken in the early morning and had no cars in them and I decided to use one of them on my backdrop. The problem was how to combine these color slides with the black and white vintage photocopies I had gotten from the library. Another friend, Paul Godfrey, helped me by making a black and white print from Wally's color slide. Your local photo finisher can do this for you.

I dry-mounted my photos to a piece of 1/8 inch thick masonite. Then I cut out the photos along the skyine using a very fine Skil's slow cut-fine finish 36 t.p.i. blade (Cat. #71922) sabre saw blade. I mounted my blade in a table saw attachment and removed all of the masonite above the

skyline and between the streets. The area between the streets was cut down low enough so that the three dimensional model buildings in front were higher than the top of the cut off masonite. I had allowed for the thickness of the masonite when I planned my module which is designed so that the backdrop slides up and down in the back of the scene. I painted my backboard sky blue and will add clouds soon.

I next had to blend the black and white photographic background with the colored models in the foreground. Again, Paul came to the rescue. He suggested I use some special transparent oil paints which were used to color black and white photos in the old days before color photography. These oils are called Marshall's Photo Colors and are available from large photo stores which sell darkroom supplies. These colors are applied with cotton swabs and

since the oils are transparent the photodetails show through the color. I allowed full week for my colors to dry and the sealed them with a clear lacquer.

I am very pleased with my photo background. It provides a logical end to the streets on my module, provides a setting that resembles Colorado Springs in the 1930's and is unique. The most exciting part of building my backdrop was the search for photos in the library. This was real treasure hunt and I thank the staff of the Colorado Springs Public Library for their help.

The author of this article is a member of a group known as Slim Rail Modules. Specifications for modules and an information sheet are available from Ray R. Richards Coordinator, 1216 E. 70th St., Tacoma WA 98404. Ed.

ONBOARD

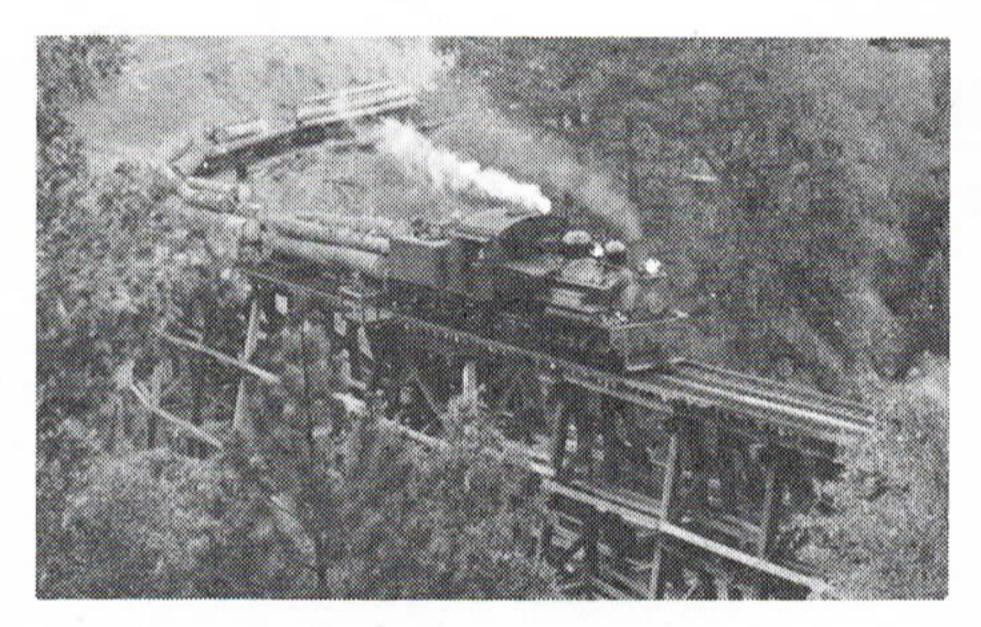
LOCOMOTIVE SOUND & CONTROL SYSTEM

The ONBOARD System has significant advantages over other ways of providing locomotive sound and control. For example:

Doubleheaded locomotives retain their individual exhaust, bell, and whistle sounds, thereby giving you all of the audio action of a prototype doubleheader.

Whistle pitch adjustments and chime selections are made with miniature controls mounted in the locomotives. Thus, each locomotive has its own sound which is a permanent part of its personality. You don't have to re-adjust the sound each time you change locos.

Exhaust synchronization is done with an optical sensor, which looks at black and white stripes on a drum or disc. The drum can be as simple as adhesive tape wrapped onto a driver axle. The arrangement works perfectly, and never wears out. You don't have to fiddle with sensitive mechanical wiper adjustments.



West Side Lumber Company #8, crossing the North Fork of the Tuolumne River early in the morning, in July of 1956. No sound system necessary! (Photo by Bob Keller.)

Exhaust synchronization for geared locomotives is easy, with the optical sensor. Painting 15-or-so narrow black stripes on a drum is no big deal!

Locomotive speed and direction control is by means of electrical signals sent through the track. You don't have to divide your railroad up into "blocks", you don't have to install a "cab" for each engineer, you don't have to string miles of wire, and you don't need a schematic diagram of your wiring. When running with ONBOARD, you can give all your attention to the operation of your locomotive. You're not distracted by such irrelevant matters as track polarity, block boundaries, or reversing loop peculiarities.

For the cost of a console-type system capable of providing sound and speed control for only one locomotive, you can have an ONBOARD System which gives you sound and control for four or five locomotives operating simultaneously.

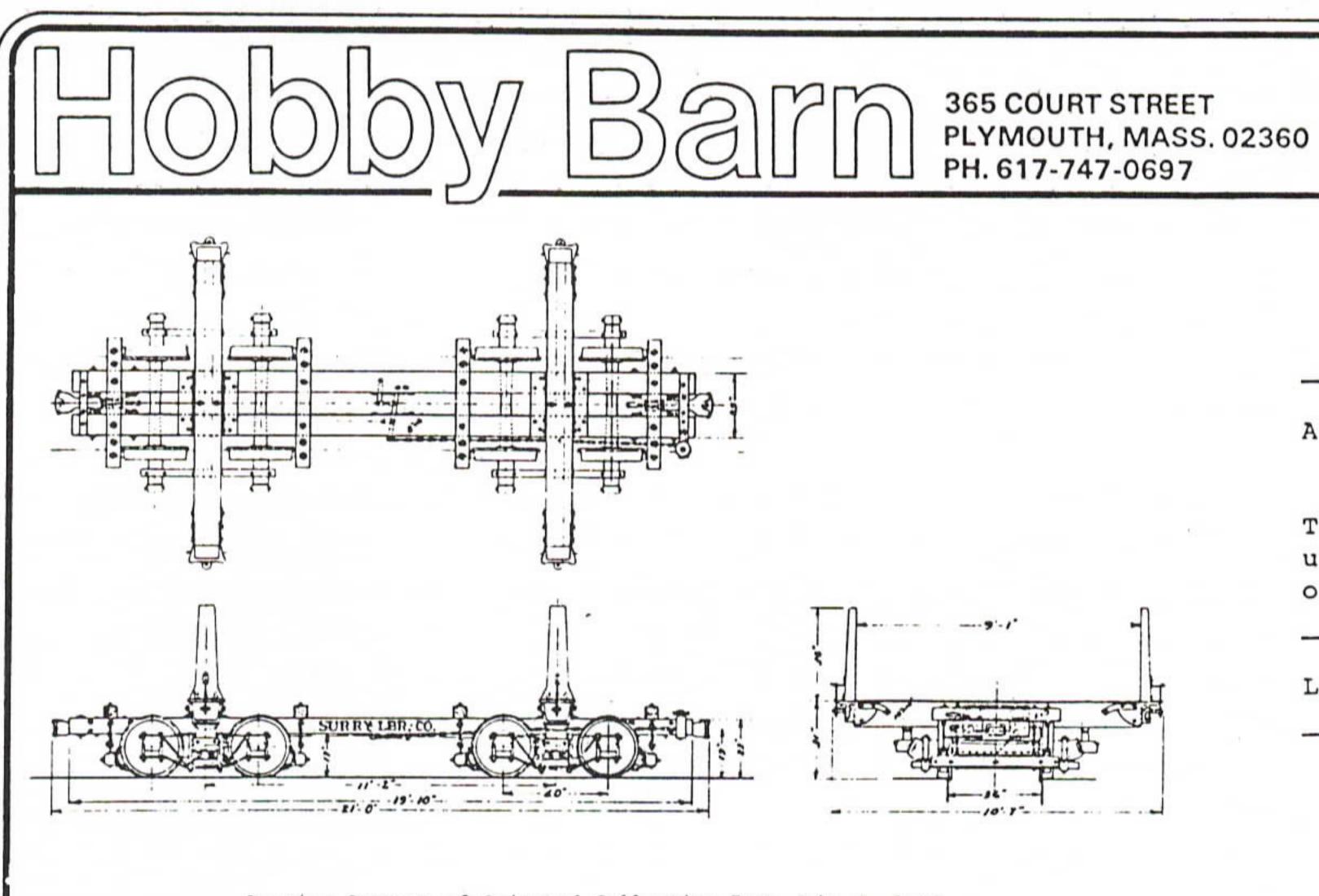
The ONBOARD System has it all together. You get reliability, unmatched features, and reasonable cost. Check it out!

For the new, 45 minute casette recording of ONBOARD sound, a catalog and price list, and a coupon good for a \$5 discount on your first purchase of ONBOARD equipment, send \$5 (\$2.50 with evidence of prior tape purchase) to:

KELLER ENGINEERING 200-G San Mateo Avenue Los Gatos, CA 95030

PORTLAND PRODUCTS

WITH A LITTLE YANKEE INGENUITY"



STANDARD CONNECTED LOG CAR

AS BUILT BY THE KILBY CAR & FOUNDRY CO. DETROIT, MICH.

The model for well over 100 such cars, used by the Surry Sussex & Southamton Ry. of Virginia, in their logging operations.

LINK & PIN COUPLERS, & HAND BRAKES ONLY.

Drawing Curtesy of Crittend Collection From John T. Derr

577-1400 On3 S.S.& S. Ry. Log Car with 19" coupler height, Kit, Brass Castings.....\$49.95 577-1401 On3 S.S.& S. Ry. Log Car with 19" coupler height, Built Up, Brass Castings.......59.95 577-1402 On3 Kilby Car & Foundry Co. Log Car with 26" coupler height, Kit, Brass Castings......49.95 577-1403 On3 Kilby Car & Foundry Co. Log Car with 26" coupler height, Built Up, Brass Castings..59.95 577-1404 On3 S.S.& S. Ry. Log Car with 19" coupler height, Kit, White Metal Castings......39.95 577-1405 On3 S.S.& S. Ry. Log Car with 19" coupler height, Built Up, White Metal Castings.....49.95 577-1406 On3 Kilby Car & Foundry Co. Log Car with 26" coupler height, Kit, White Metal Castings.39.95 577-1407 On3 Kilby Car & Foundry Co. Log Car with 26" coupler height. Built Up, White Metal.....49.95 577-1408 On3 S.S.& S. Ry. Connected Log Car Trucks for 19" couper height, Brass Castings......15.95 577-1409 On3 Kilby Connected Log Car Trucks for 26" coupler height, Brass Castings...........15.95 577-1410 On3 S.S.& S. Ry. Connected Log Car Trucks for 19" coupler height, White Metal Castings. 10.50 577-1411 On3 Kilby Connected Log Car Trucks for 26" coupler height. White Metal Castings......10.50 The above cars may be ordered with Grandt 24" plastic wheels, or NWSL 24" metal wheels. The cars come with sprung trucks. The couplers are extra. PLEASE SPECIFY WHICH TYPE.

MASTER CHARGE AND VISA ACCEPTED
New Illustrated O Scale Portland Products
Catalog \$1.75

STORE TH-F 10:00-6:00 HOURS SAT 10:00-6:00

MASS. RES. ADD 5% SALES TAX PRICES SUBJECT TO CHANGE ADD \$ 1.75 SHIPPING ON ALL ORDERS

SHOSHONI

by George Konrad Photos by the author

have always been fascinated by railroad-steamboat interchanges. Long ago, I promised myself that someday I would find an excuse to model a rail-steamer exchange on my On3 Tonopah & Tucumcari. When I did some research on steamboats in the western U.S. I found that shallow draft steamers were not uncommon on western rivers and deeper draft boats were common on various western lakes. By a stroke of good fortune, my T&T runs right along the shore of a huge lake. (Imagine that!) Passengers bound for the resort across the lake demanded a small screw-steamer so they could complete their trip in comfort. (Rowboats and launches were a bit too adventurous on such a huge lake.)



In order to decide exactly what size and type of boat to model, I did some more research. The book, Steamboat Lore of the Penobscot, written and published by John Richardson of Rockland, Maine is a good source of steamer photos. My friend John Willock recommended the book, Pictorial History of New England Passenger Vessels by Bartlett Cram. This 400 page book is available from Burncoat Corporation, c/o R. L. Hawkes, RFD #1, Fairfield, ME 04937 for \$35.00 plus \$2.00 postage.

There are several HO and O scale boat kits available that can be used as a starting point for a steamer. HO scale kits seem to be less expensive; as the boats get larger in scale they tend to get more complicated



(individual planks on frames etc.). When I saw Revell's HO New York City harbor fireboat model, I knew I had found the kit for me. Its huge hull scales out just right for an 80-foot long O scale steamer. If you cannot find a suitable kit, you can make a hull from wood, carving it to shape and planking it over if you wish.

I made a drawing of the side view of my boat on a piece of cardboard so I could stand it in my dock area to see if it looked right. The profile and deck plan of my steamboat, *Shoshoni*, are shown here. You can copy them and cut and rearrange the cabins and decks until the boat seems right to you.

The plastic hull from the kit needed some wood and styrene braces inside it to help it keep its shape when it was cut off at the waterline. I also cut away over and undersize details. The Shoshoni has a "steel" hull with wooden upper structures. I made a new deck for my model by using Northeastern 1/8 inch scribed siding for all the decks, cut to a cardboard template. I scored the plank ends and put nail holes in the deck.

The flat areas of the cabins are pretty easy. It's just like constructing a building. However, the curved cabins were a real treat to build. I Made a curved top and bottom to serve as templates for each cabin. Then I cut the siding to the correct height and length and soaked it in very hot water until it bent easily. White glue was placed on the edges of the top and bottom pieces and rubber bands held the siding strips in place until they dried. This method also works for railings, deck edge boards, and roof trim.

Suitable windows and doors are available from Grandt Line. For my O scale

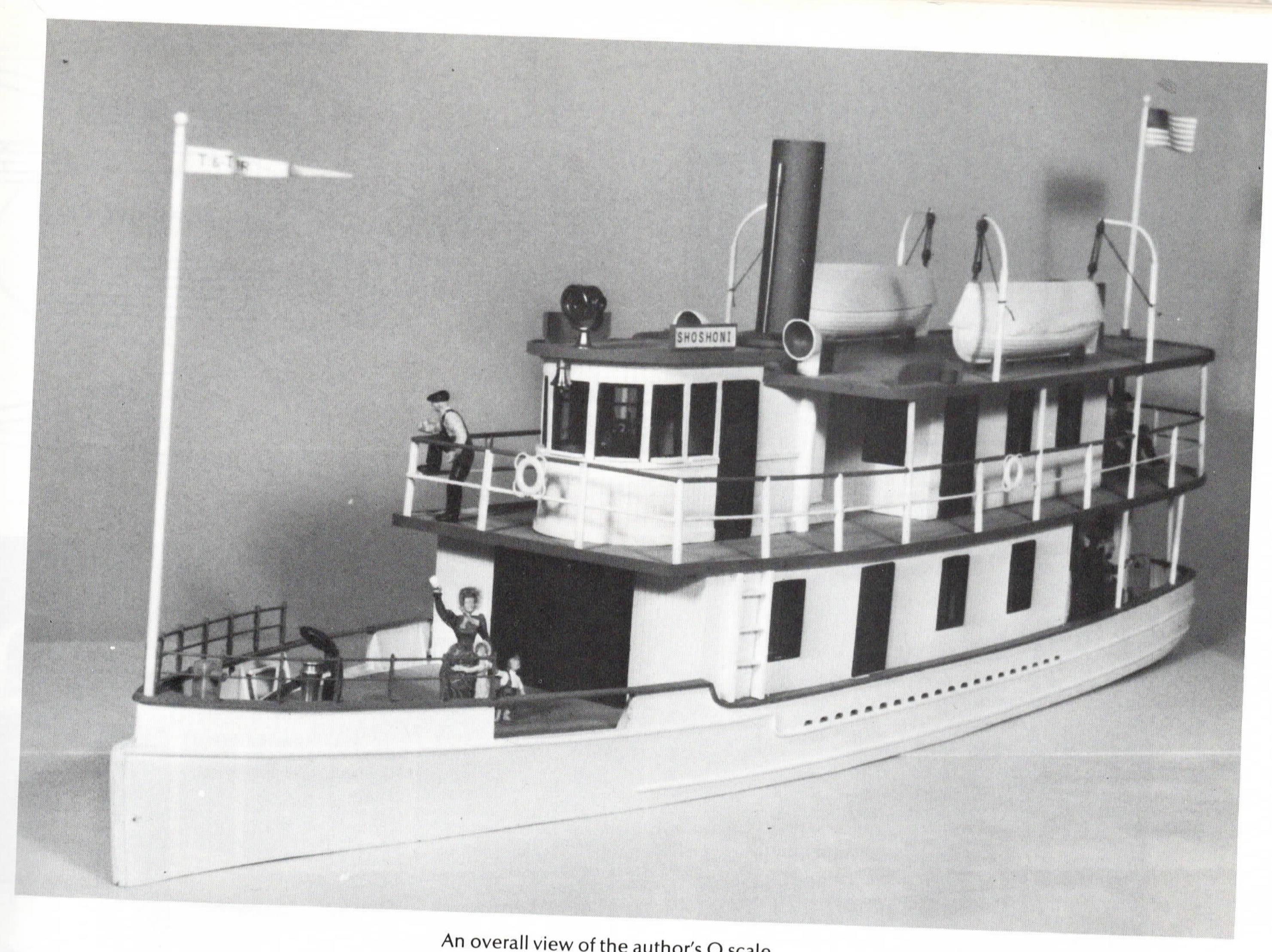
steamer, I used #3719 windows for cabins. I removed some of the mullion these windows. The pilot house has #3 coach windows, and a #3617 office The cabins have #3603 station doors

I built the railings out of brass wire tiny wooden dowels. These dowels also used for the flagstaffs at the bound stern. The boiler and smoke stack are tubes and the ventilator and life boats purchased from a model boat supply how Check your original plastic kit, if you one, to make sure you have not overlocate any details. You can detail your boar much or as little as you want, but do some deck chairs and figures to add Interior detail for engine room, sal cabins, and cargo hold would add interest My Shoshoni is empty except for the house which has a binnacle, wheel, and dashing bearded captain.

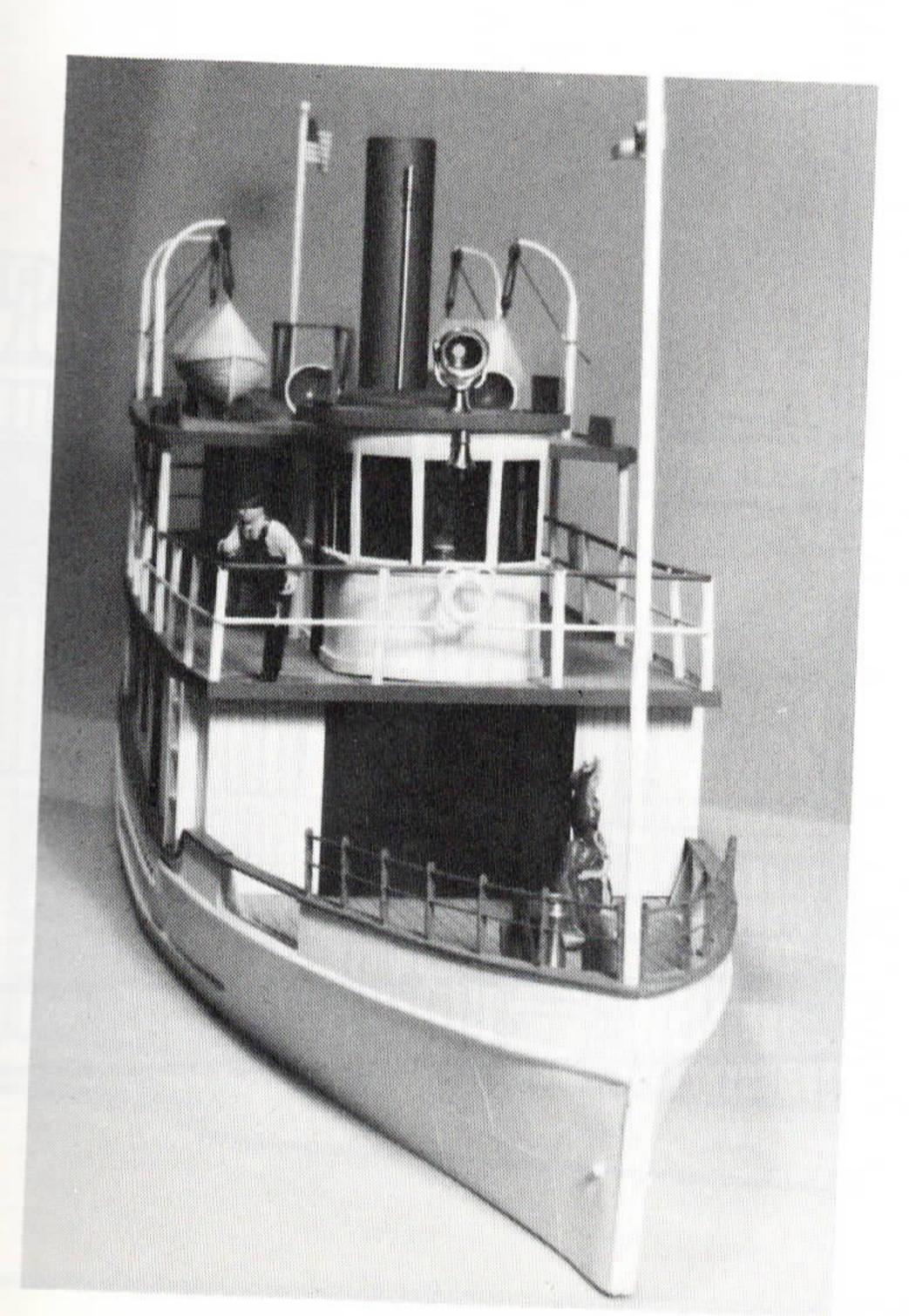
A steamer can be painted any color like as long as it comes out light with a trim. The Shoshoni is painted white black and natural wood trim.

I am now constructing a typical scene for the Shoshoni, I plan to have train run right out onto the dock to meesteamer, just as The Lake Tahoe Railwa Transportation Company trains did to the steamer, Tahoe.

I chose the name Shoshoni for a special reason. Shoshoni (later Shoshonis a name collectively applied to a number of Indian tribes which lived in area from the Sierras to the Great Planard from Oregon and Wyoming down Arizona and New Mexico. My Tonopa Tucumcari is located entirely within lands and the steamer is named in thonor. In "Shoshoni" the "i" is pronounce "aye" as in "Aye aye, sir."

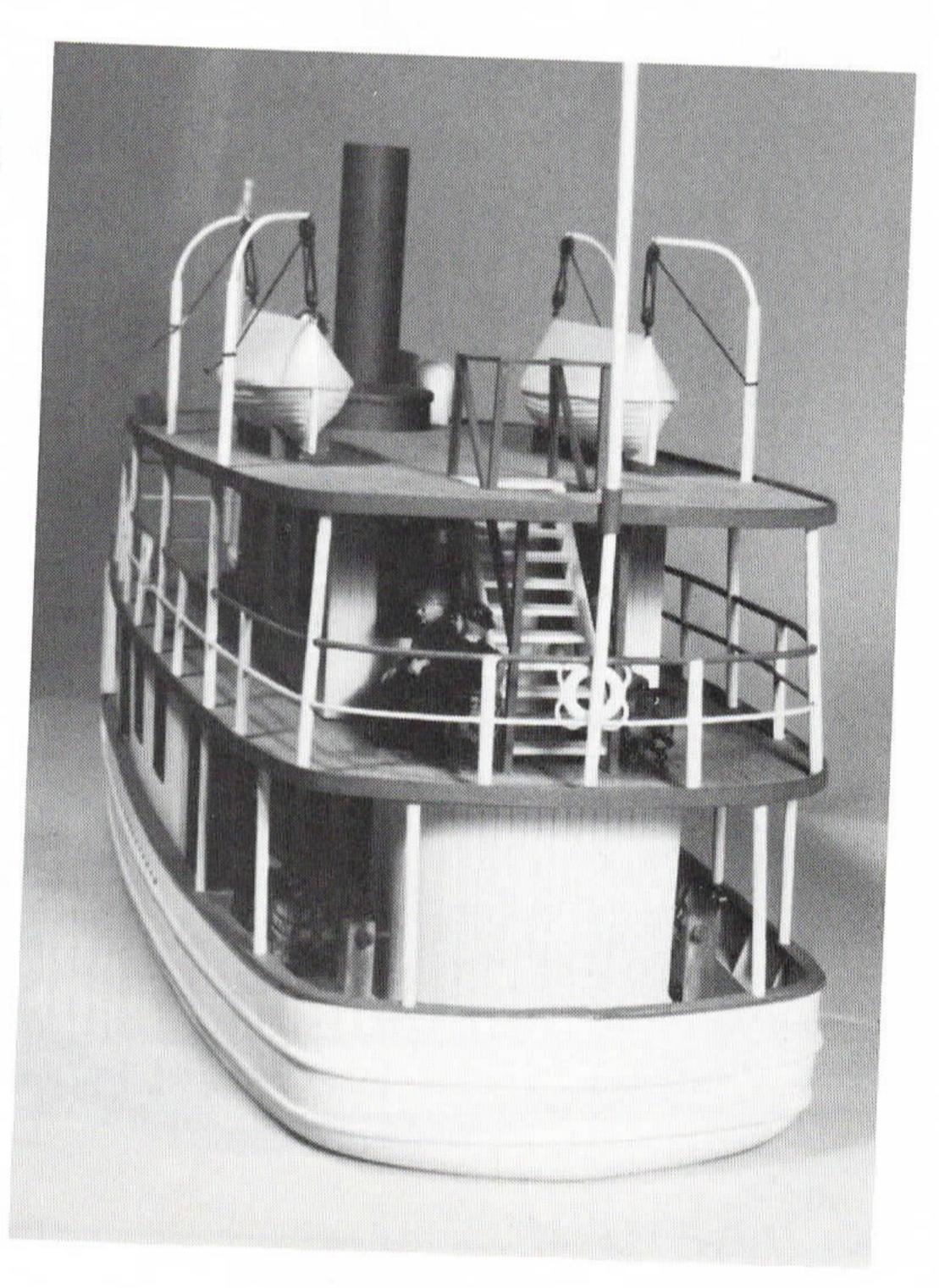


An overall view of the author's O scale steamer. He plans to create a dock-side scene where his Tonopah & Tucumcari will meet the boat. The train will run right out on the dock as did the real Lake Tahoe Railway and Transportation Company trains when they met the steamer, Tahoe.

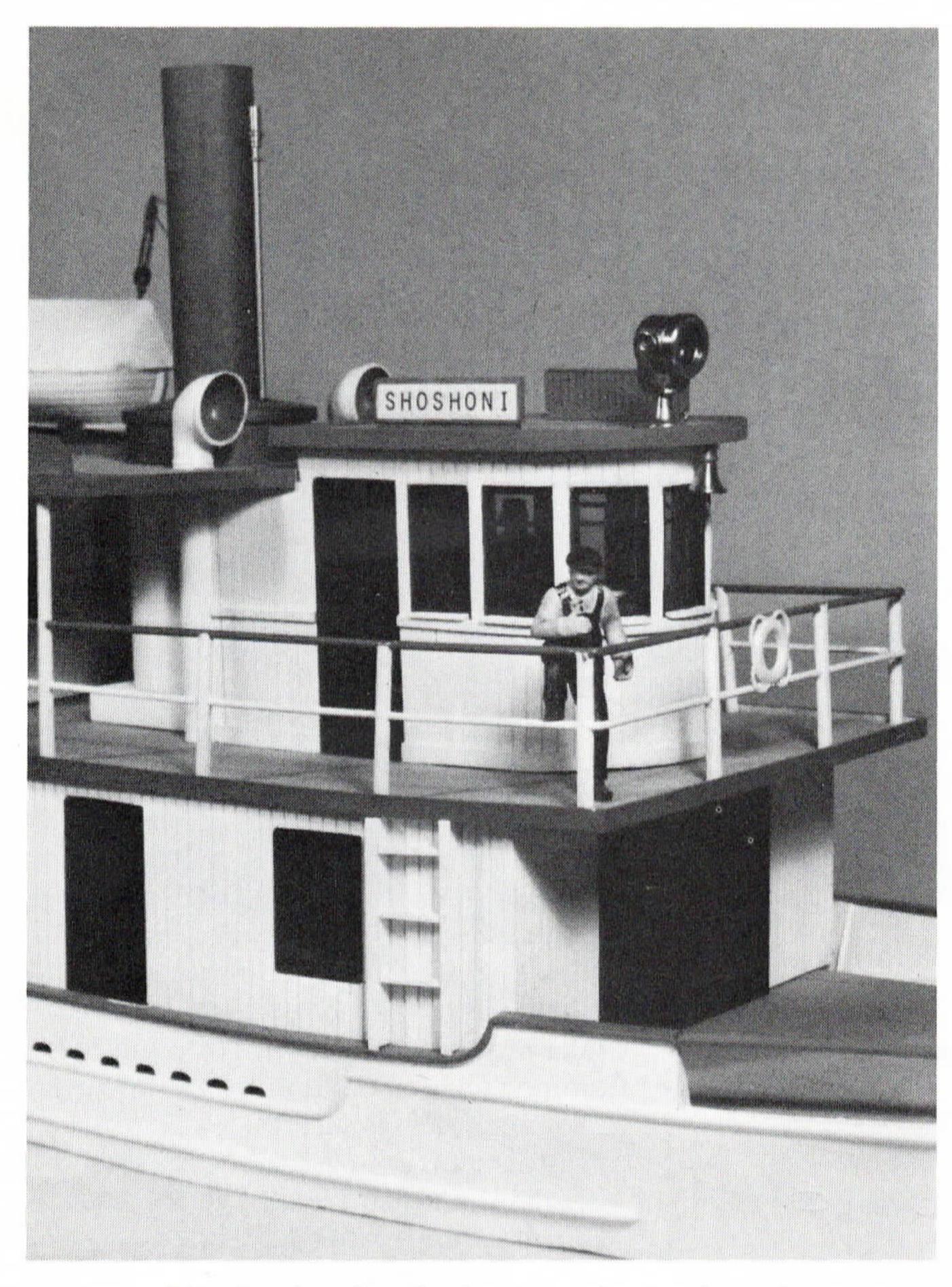


A head on view of the Shoshoni showing the large cargo doors and flag pole.

The stern of the Shoshoni with ladders, life ring and other details.

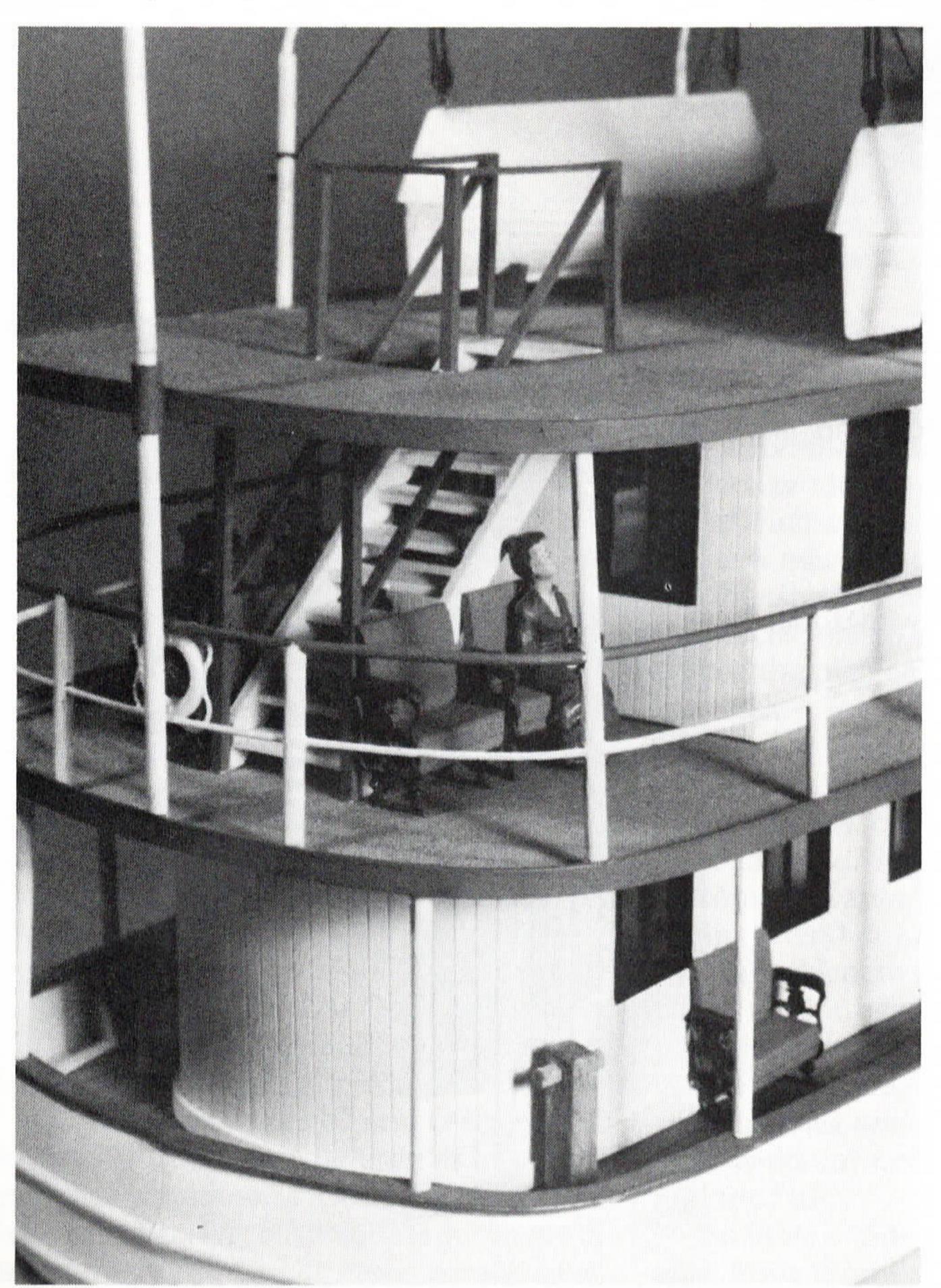


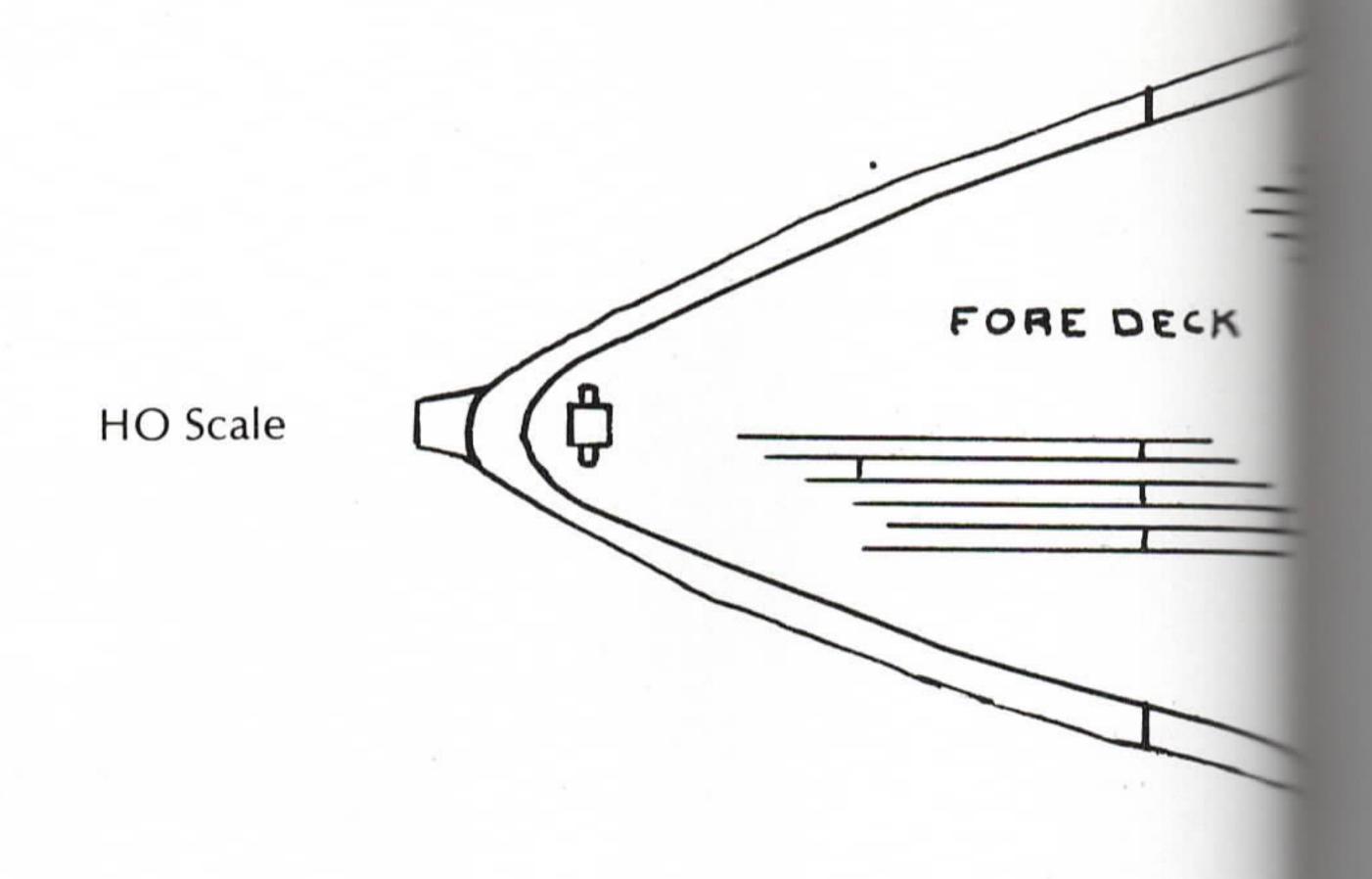
NOVEMBER/DECEMBER 1984



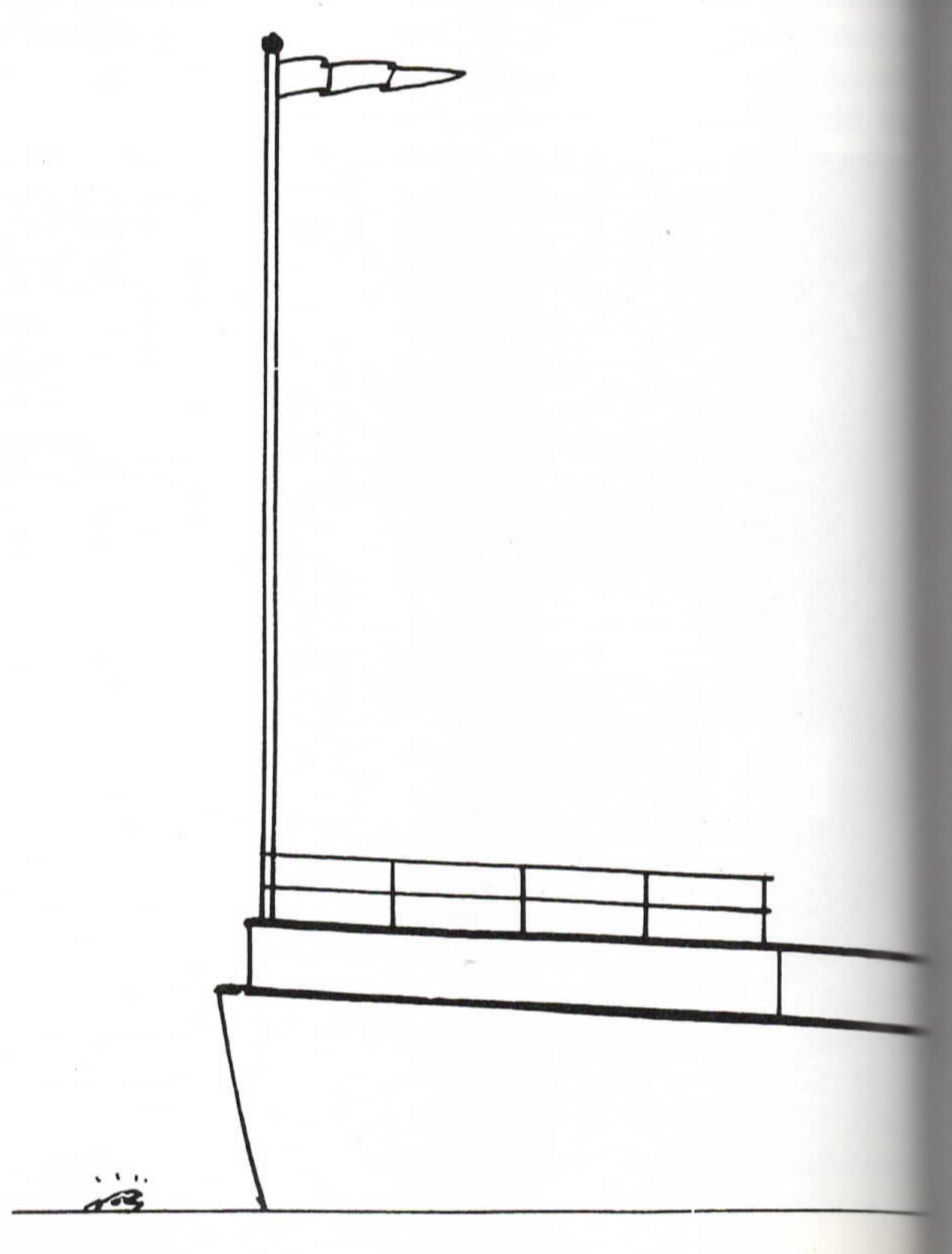
The Shoshoni's pilot house and name board.

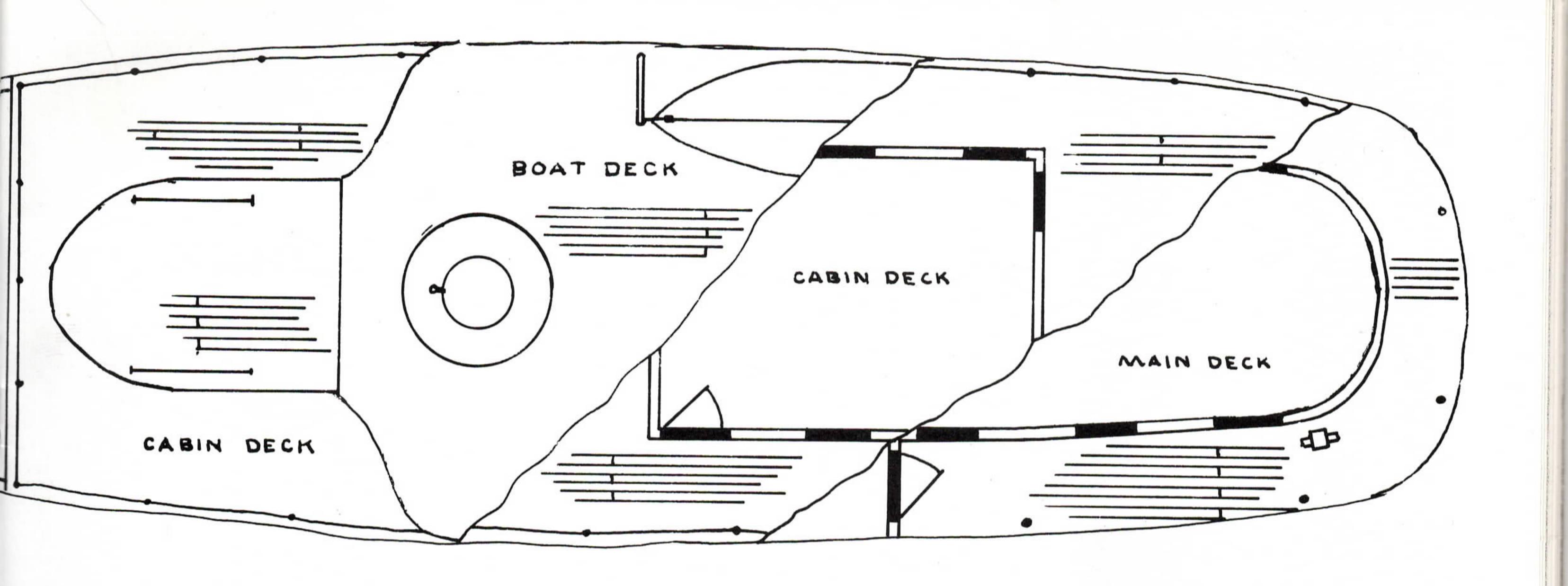






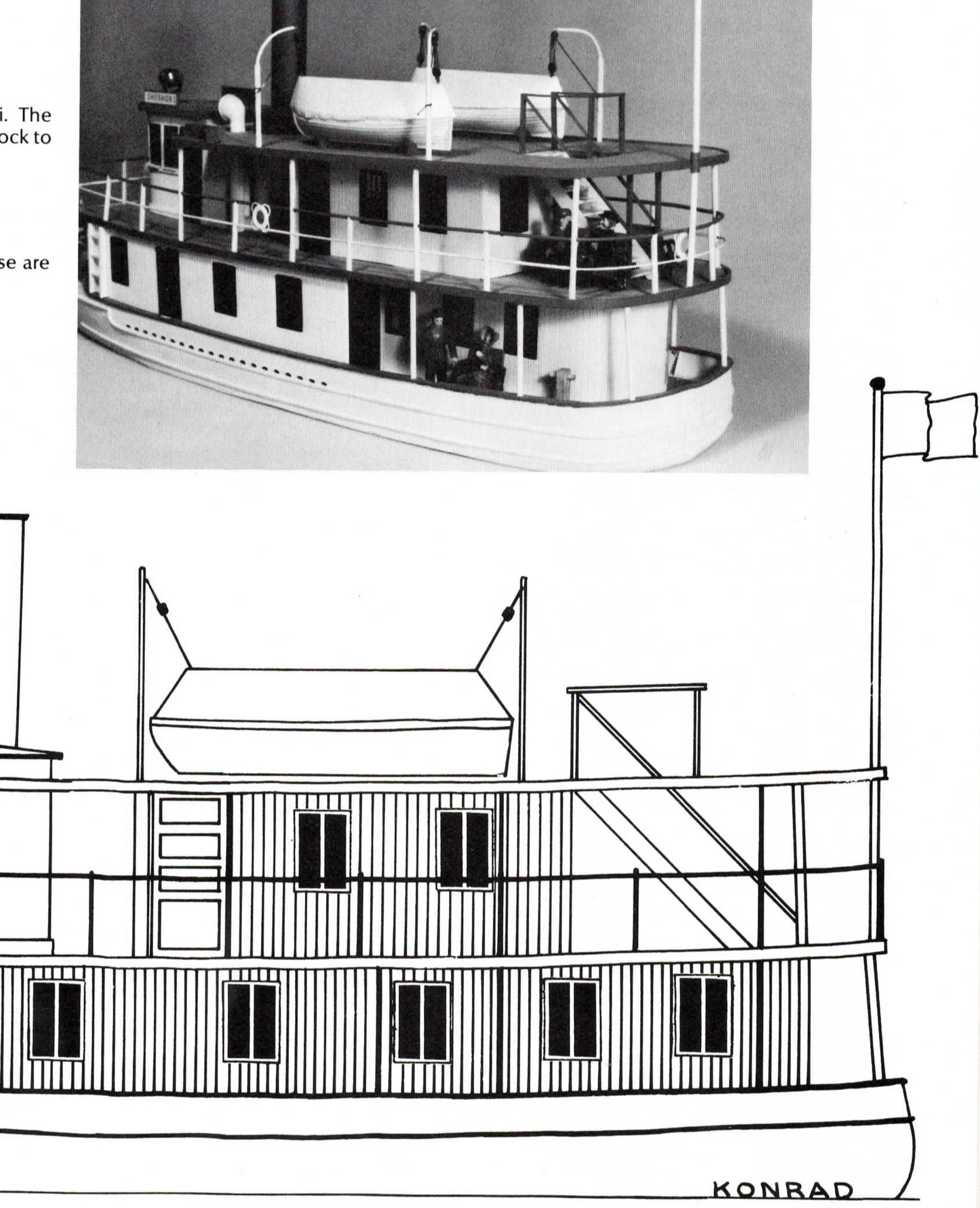






Left: The figures add life to the Shoshoni. The author plans to run his railroad out onto a dock to meet the steamer.

Right: The windows of the curved pilot house are made of plastic.



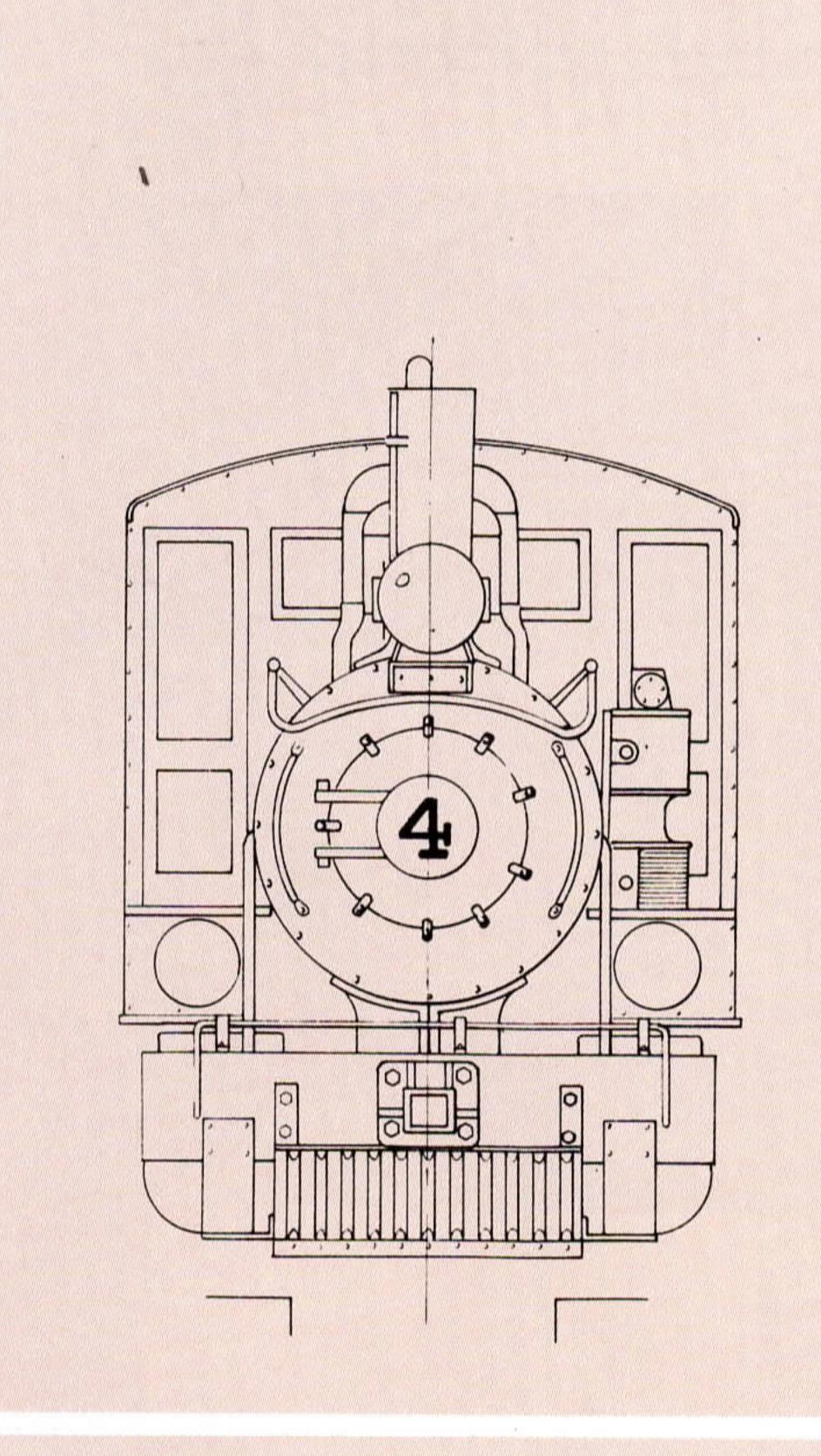
MAGMA ARIZONA COPPER COMPANY #4

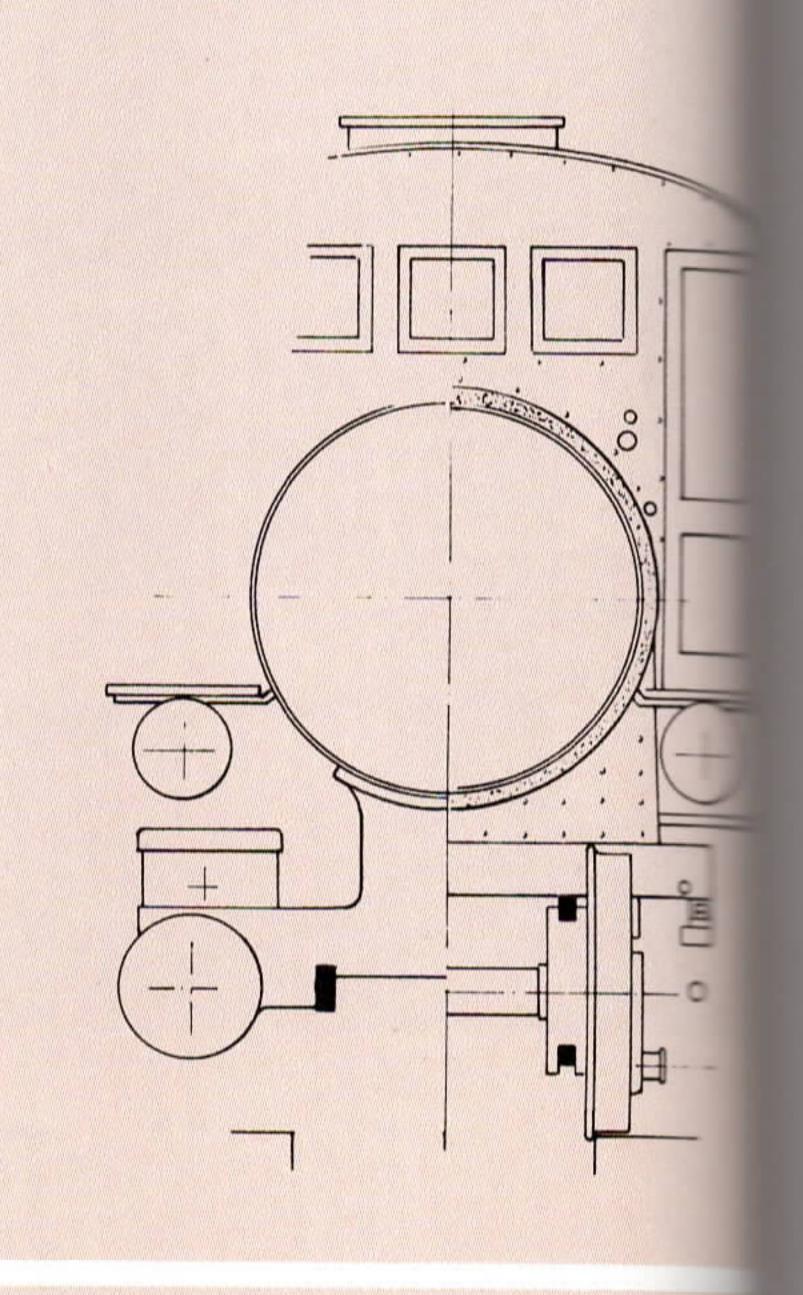
by Ed Gebhardt

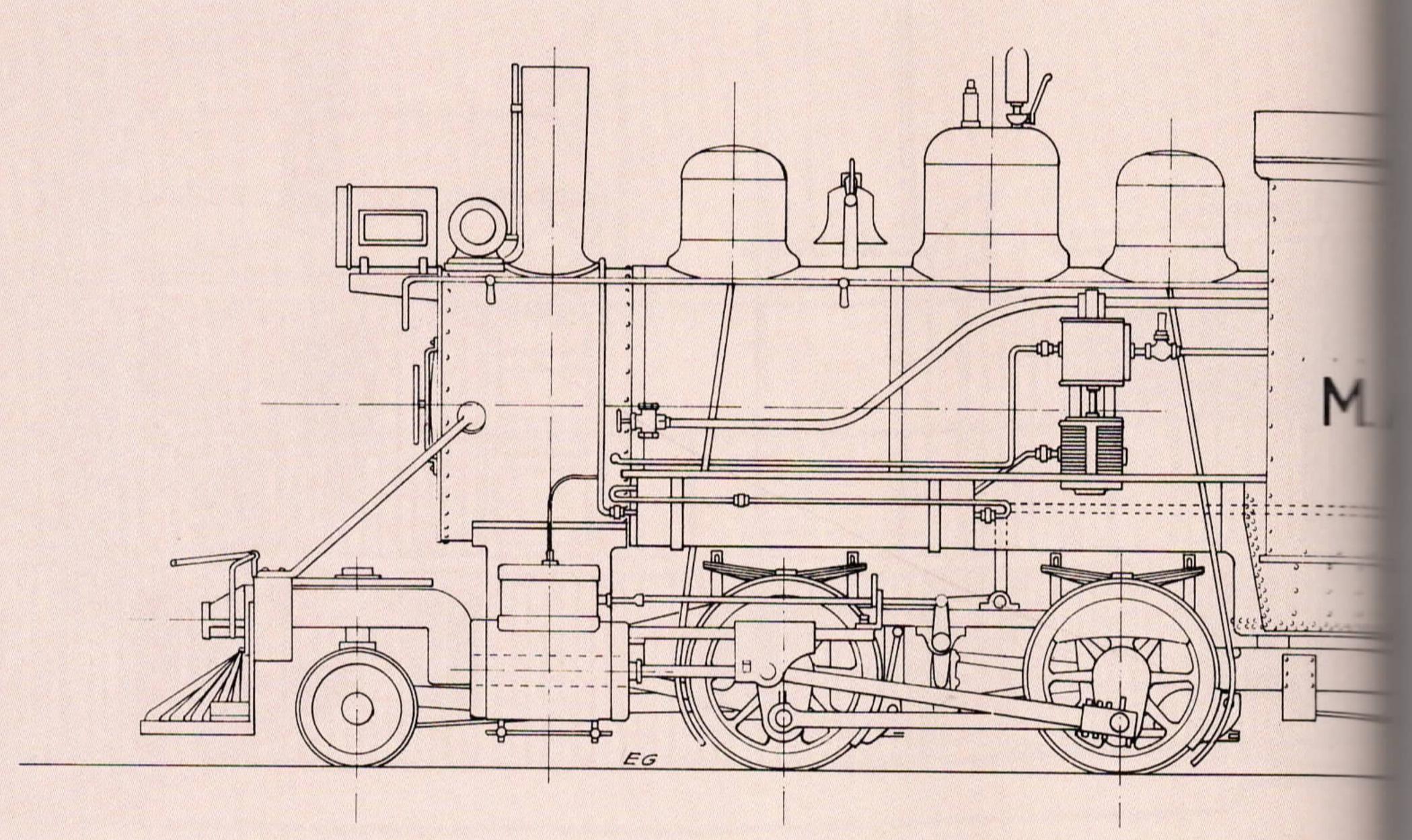


The 2-4-2 wheel arrangement was not very common. This little engine was built by the American Locomotive Works (Cooke) in 1917. It was #4 on the narrow gauge roster of the Magma Arizona Copper Company. There were three other narrow gauge locomotives on the Magma roster. One and two were 2-4-2T engines while 34 was almost identical to the #4. When built the engines were elaborately striped and lettered. My drawing shows the engine lettered simply and economically as it would have been in later years. The engines were built with wooden pilots which were replaced with boiler tube pilots. All of the engines burned oil.



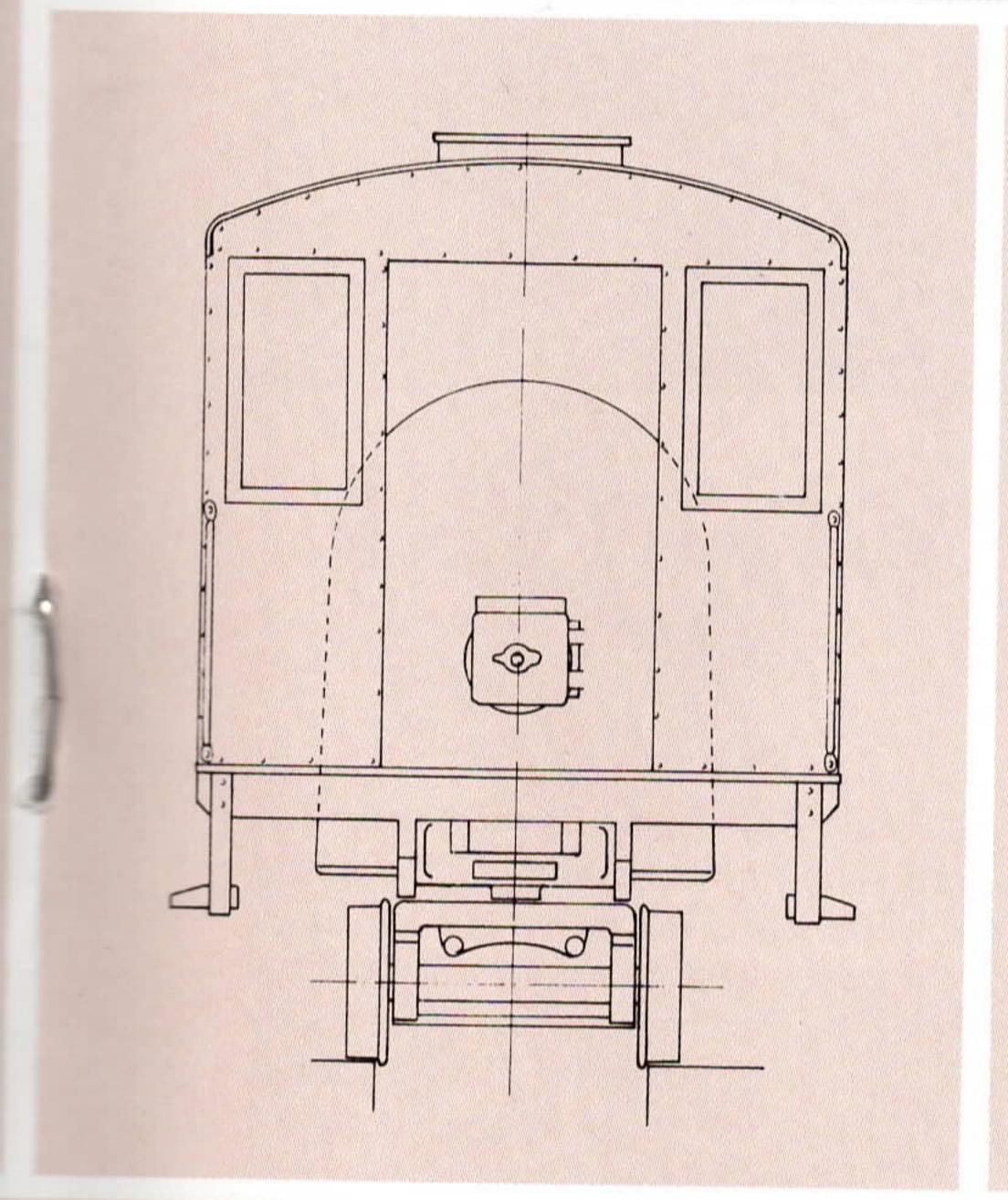


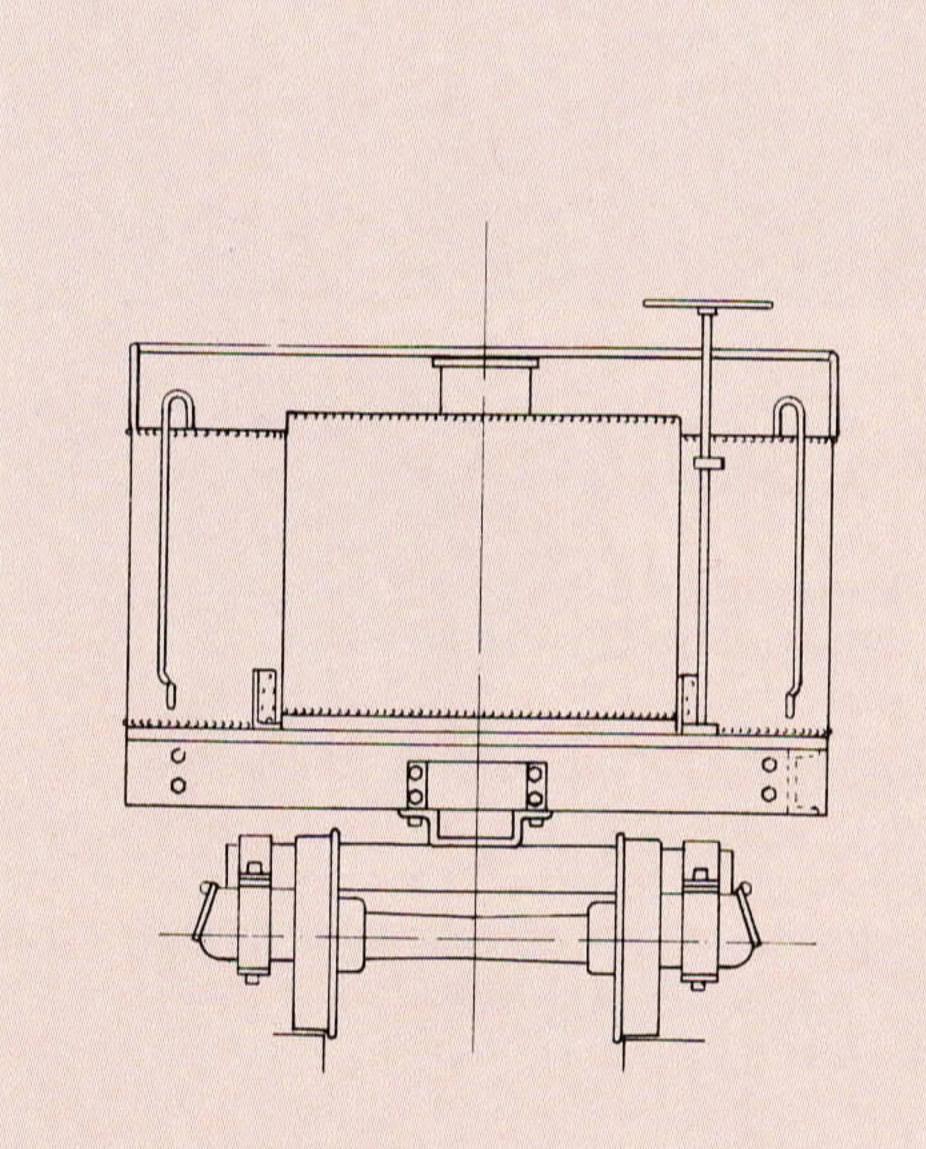


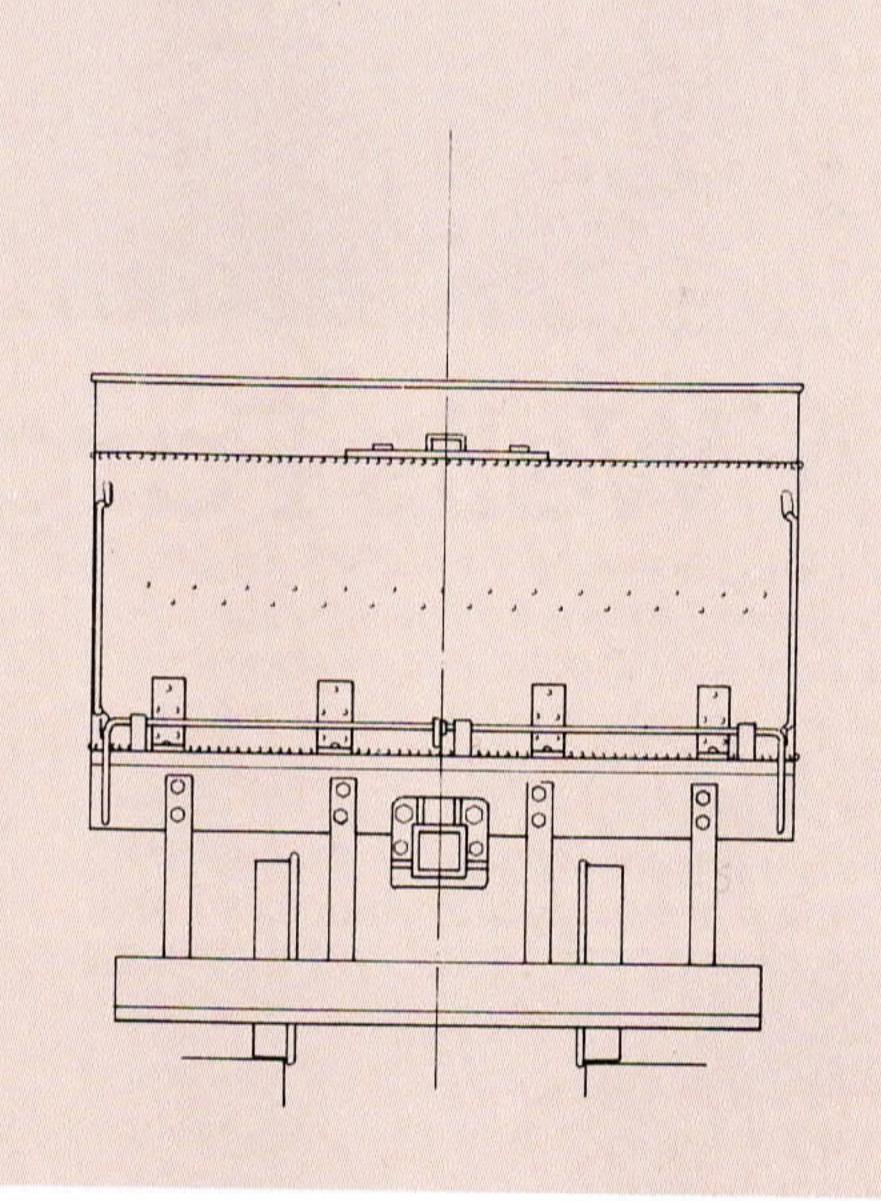


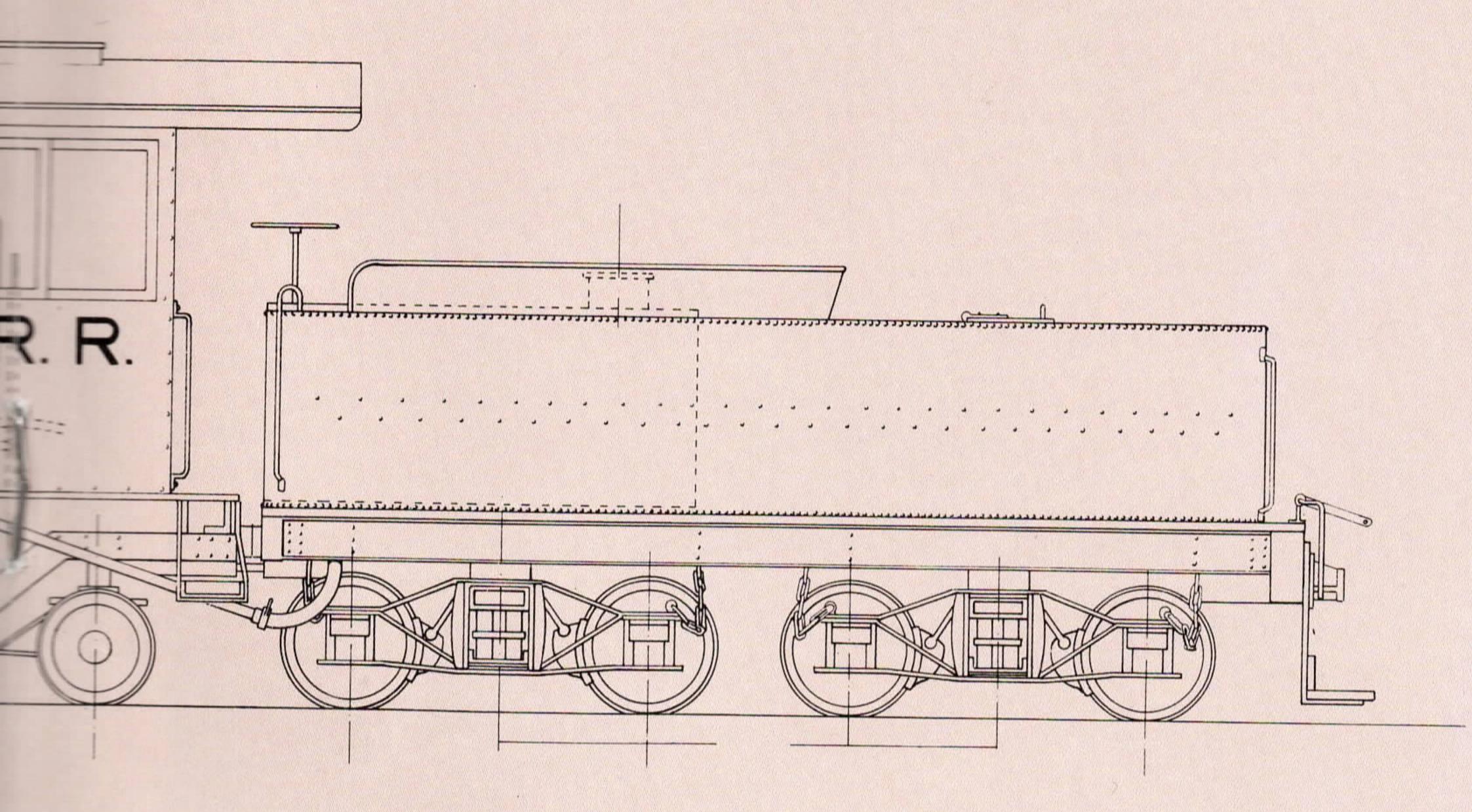


Photo, collection of Harold K. Vollrath

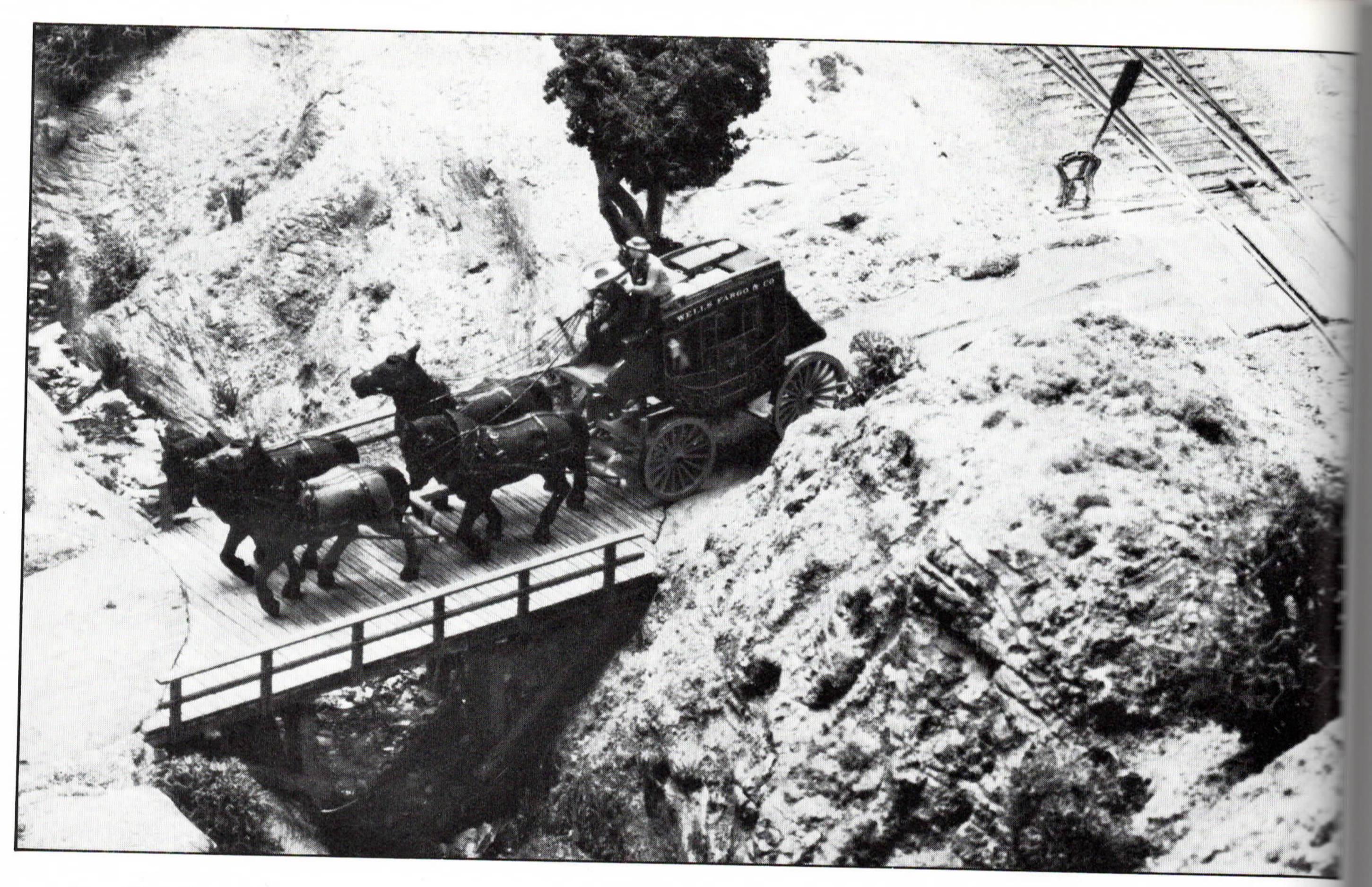








Scale: ¼ inch = 1 foot



A Wells Fargo Concord Coach in HO

by Annemarie Sicherer-Roetman Photos by Carel Sicherer

The beginning of the end for stage-coaches in the western U.S. came with the Gold Spike Ceremony at Promontory Point, Utah on May 10, 1869. Until then it took three weeks to reach the Pacific Coast from St. Louis by stagecoach. With the coming of the railroad, such a journey was accomplished in a matter of days. However, until late in the 19th century, stagecoaches were used to connect railroads with remote areas and the Concord coaches went everywhere that railroads did not.

The town of Twin Trees on my HO scale Silver Creek Railroad has a twice-a-week stagecoach service up to the surrounding mining communities. I wanted a stagecoach for my stageline and the only one I could find was an HO model made by the German firm of Preiser. This stagecoach is sold with either two or six horses. Since I planned to replace the horses I chose the two-horse set.

I was not satisfied with the non-detailed paint job on the coach and I felt some of the parts on the coach were too coarse so I decided to rebuild my stagecoach. As with all Preiser wagons, the coach has a molded plastic body with metal wheels. The coach body is well molded but the underframe is not correctly proportioned. Comparing the model with photos of prototype Concord stages showed that the model sat too high on its wheels. The wheel base was also too

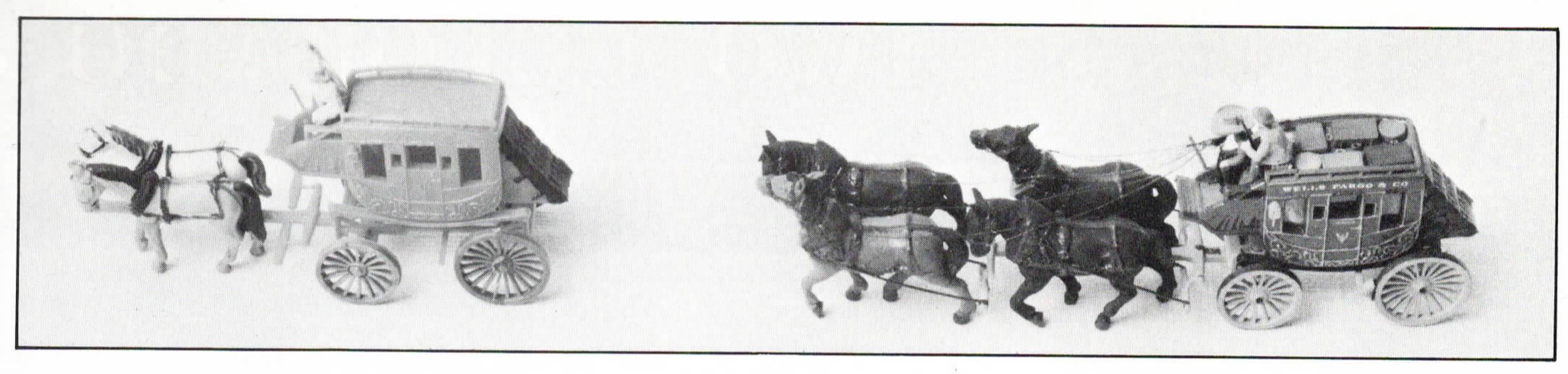
short and the axles were too long. I started by cutting apart all of the individual parts Preiser had glued together. This resulted in two horses, one driver, wheels, axles, underframe, body sides and roof in one piece, and the body base. I modified the underframe by cutting the "leather" springs from the frame and reducing them to about half of their original height. The frame was cut through crossways in the middle and a small piece of styrene was used as a "splint" to re-fasten the two pieces of the frame together about 3mm longer that it had been. I installed Kemtron #6366 brake shoes on the ends of the brake beams and fashioned new double-trees from small pieces of styrene strip. These were glued at the front of the horse shaft to accommodate the two additional horses I wanted to add to my coach. At this point I painted the underframe yellow. The springs were painted black and glued between their supports. I cut off the small inside rings on the wheels and drilled new shallow holes. Then the wheels were painted yellow with black centers and tires. The axles were cut about 3mm shorter, slipped into the frame and the wheels were glued back on the axles with ACC.

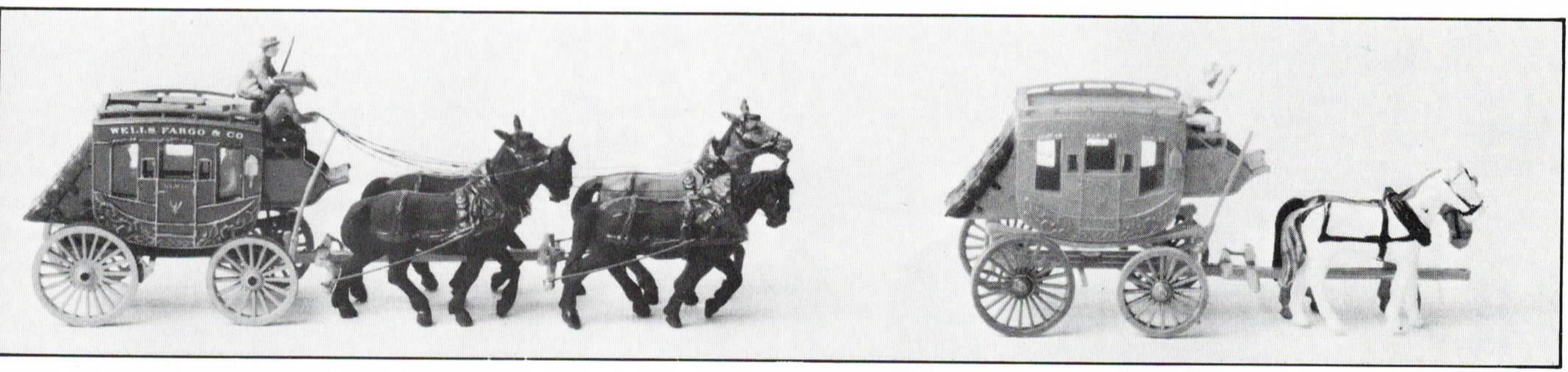
Title photo: The Wells Fargo coach crossing Silver Creek on the author's layout.

The body base and sides were painted dark red. The top was painted brown and the back cover and the rolled curtains dargray. I dry-brushed the sides with yellow paint to bring out the cast-on detail. Cleated the was used to glaze the windows through which the three Preiser figures added can be seen. I then fastened the base to the body and lettered the coach; this was the hardest part of the whole conversion used individual Walther's Railroad Roman decals for the lettering.

The coach body was positioned on the frame so the back was right above the reaxle. Two more Preiser figures were hire as a driver and armed guard. The drive was scalped and dressed up with a SS Ltd cowboy hat. The guard was equipped with an SS Ltd. rifle. I put some Jordan and Preiser baggage on the roof of the coach and added four horses from an un-painted Preiser set #327. Their collars were filed down a bit; one was painted brown while the others were painted black. The hanesses were all painted black. Copper with painted black was used for the reins.

After the photos had been taken I light weathered the coach with some dry pigments. I hope I have shown you how a femodifications to a stock Preiser stagecoact can result in a nice looking model for a turn-of-the-century model railroad such a mine.

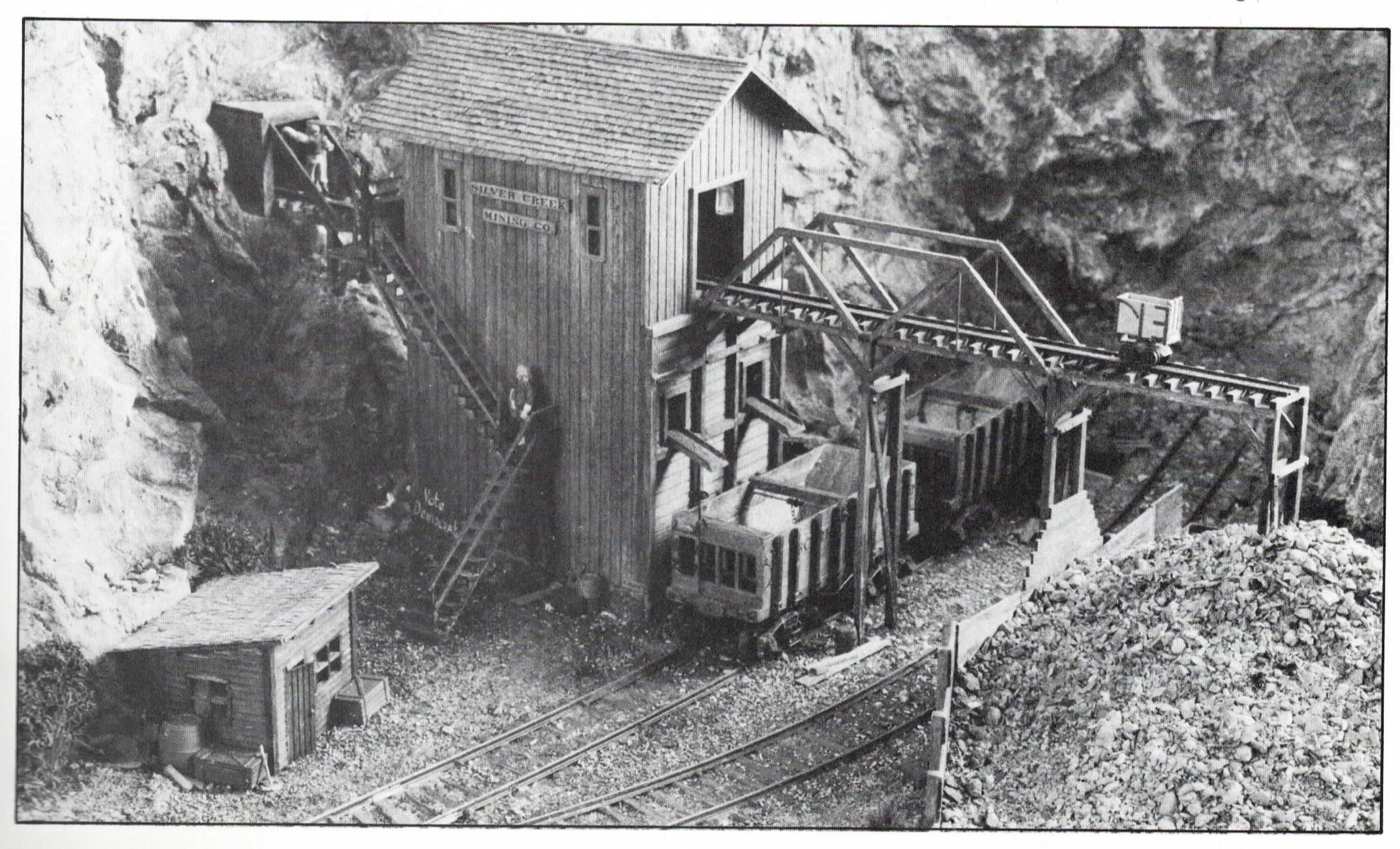






These three photos show a stock Preiser HO stage coach along side the author's modified model. Notice the detail on the modified model.

The Silver Creek Mine on the author's Silver Creek Railroad. A stage line runs twice weekly from the Silver Creek Railroad to remote mining communities in the mountains. The author modified a Preiser HO coach into the nicely detailed and accurate Wells Fargo coach for use on this line. The mine is from Timberline, the cars are from Classic Miniatures, and the ore car is from Durango Press.

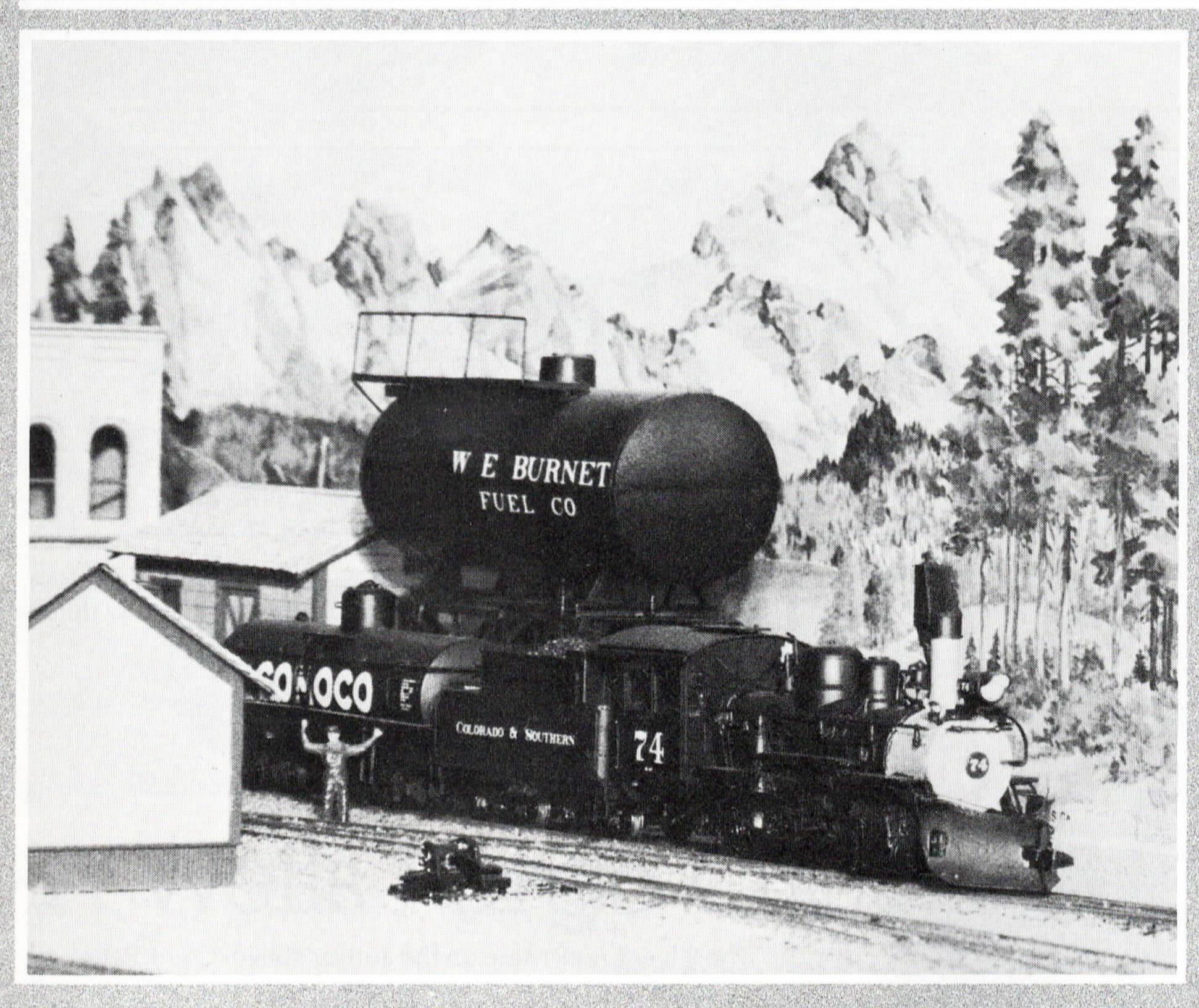


NOVEMBER/DECEMBER 1984

ITWO COILORAIDO

by Heather C

CONOCO TANK CAR =



The author's HOn3 tank car rounding a curve behind C&S #74.

The completed HOn3 CONOCO #8 tank car.

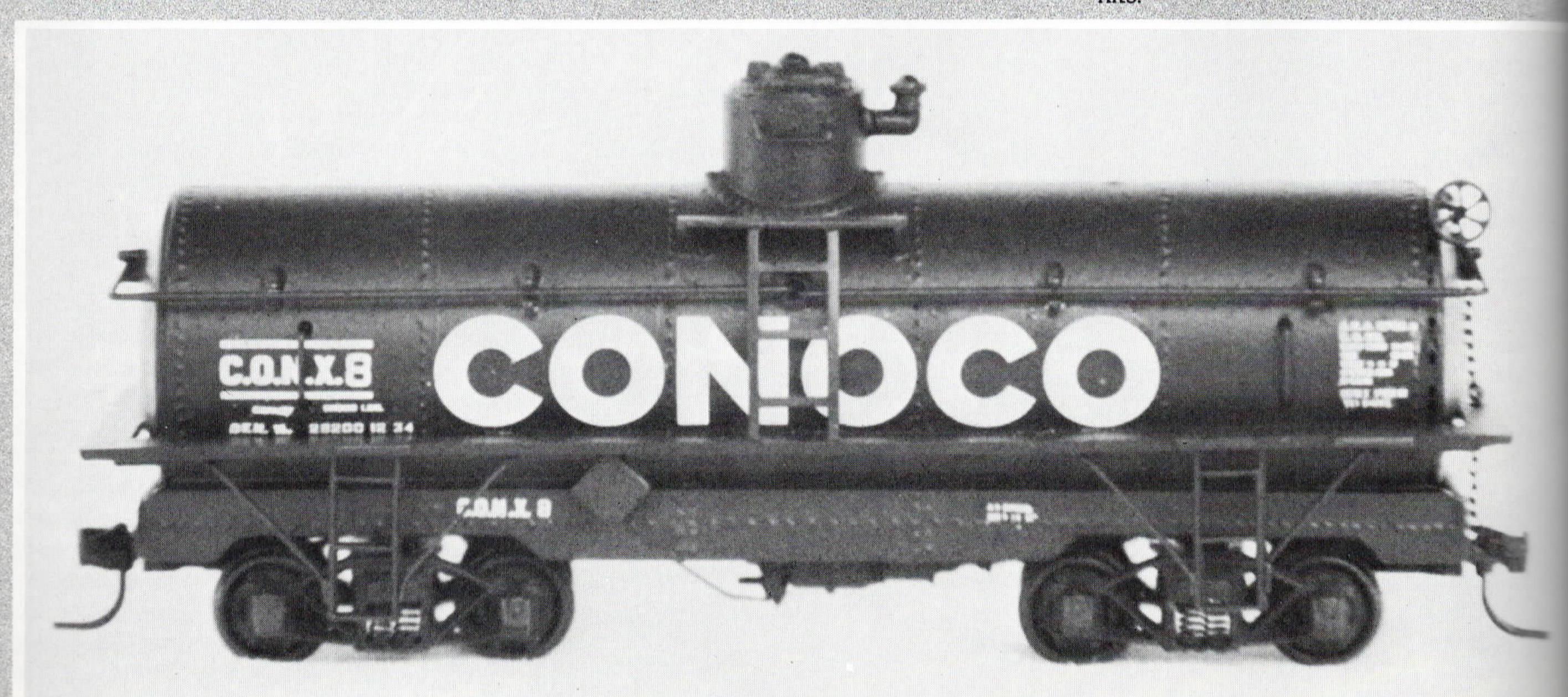
I decided to use a Model Die Catank car body with running boards ladders as the basis for my HOn3 CON0 #8. The cast-on grab irons were scrape with an X-Acto knife and replaced Detail Associates grab irons. The bawheel, chain and brake cylinder are my junk box as are the diamond shaplacard boards attached to the botto the running boards.

The frame is scratch-built using sty scraps from my scrap box. Plans from November/December 1980 GAZE (out of print) were used along with phand an article on kit-bashing tank cars that same issue. The frame was built to Central Valley narrow gauge trucks Kadee #714 couplers. The stirrup lass supports were cut from styrene and gain place with Testors liquid cement. So Glue was used for the grab irons and to frame attachment.

I airbrushed Floquil Primer on the mand let it set for 24 hours. A coat of Float Engine Black was then airbrushed on allowed to dry for around 48 hours. This decals were then applied with my painstaking patience. After the decals dried a light spray of Testors Dullcoat applied to the entire model.

The ladder from the lower platforthe upper platform was added last. It cut from brass ladder stock and brainted before being glued in place Super Glue.

This model took me about twelve he to complete. It is an easy two or evening project. So come on, girls. So your husband or boyfriend that you camore than build trees or simple plakits.



SOUTHIERN CAIRS

Photos by the author

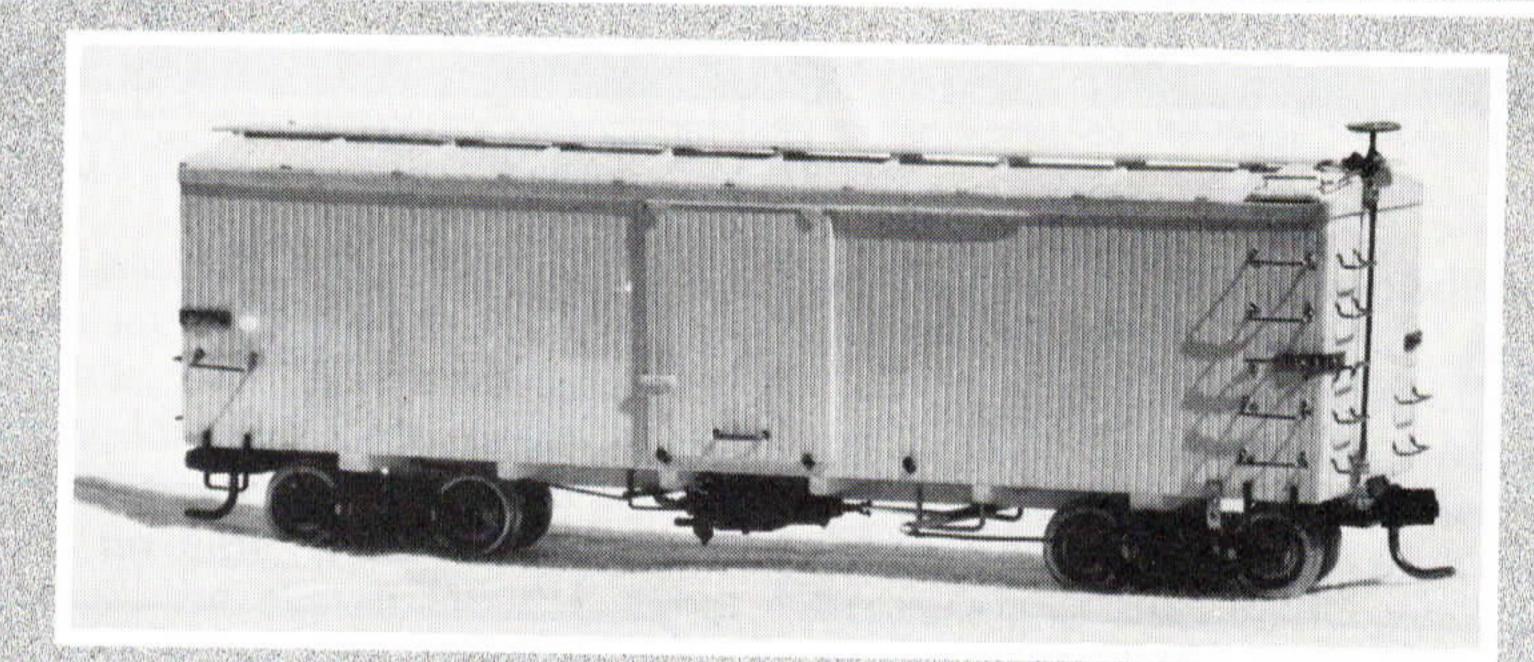
C&S STEEL UNDERFRAME BOXCAR

If you want to model the C&S you will need several steel underframe cars. Since I model the C&S and there are no HOn3 kits for these cars, I scratch-built this boxcar and am working on several more boxcars. After that, I plan to build some gondolas. I used the C&S boxcar plans from the September/October 1980 GAZETTE (out of print). Harry Brunk's articles on the Clear Creek line have been very helpful in modeling my C&S narrow gauge freight cars. My thanks to him and please keep them coming, Harry.

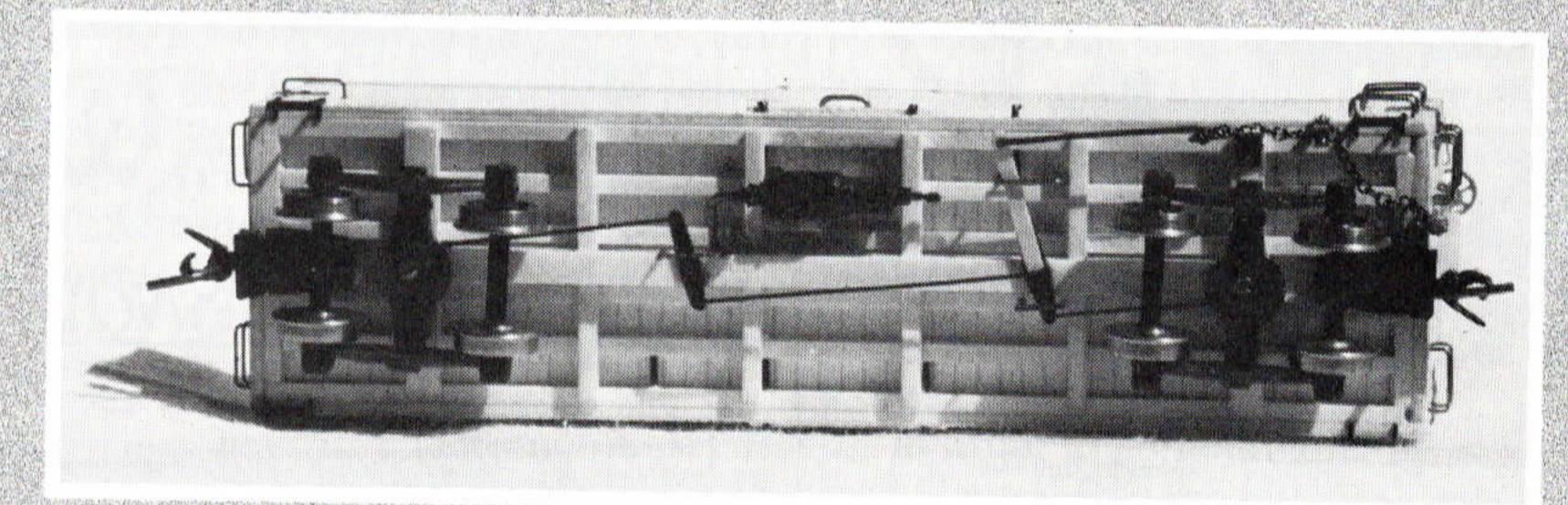
I started with the frame and the floor, using scribed styrene sheet and stryene strips. The floor was marked with a #2 pencil for the frame bracing. After the parts were all cut out, they were glued together with Testors liquid cement. The truck bolster holes were then marked out and drilled.

The side and end walls were then laid out. The door openings were drawn in and cut out. A jig made of brass was used to lay out and drill the holes for the Detail Associates grab irons. Next, the doors were measured and cut out and attached to the car sides and finally the door guides (HO spikes) were added. The door hangers are styrene and the corner straps are brass strips with rivet impressions punched into them. The stirrup steps are Grandt Line parts. I braced the insides of the car body corners for strength and glued the walls together, again using Testors cement. A main roof brace was also glued lengthwise across the top of the car.

I used a "nine-ribbed" roof on this car, but before I put the roof on I installed a weight in the car. The roof is made of a sheet of styrene with added styrene ribs. Small notches were filed out at the peak of



The completed C&S box car waiting for the paint shop.



The underframe showing the C&S brake rigging which runs on the outside of the car at one end.

Below: The completed and weathered C&S car.

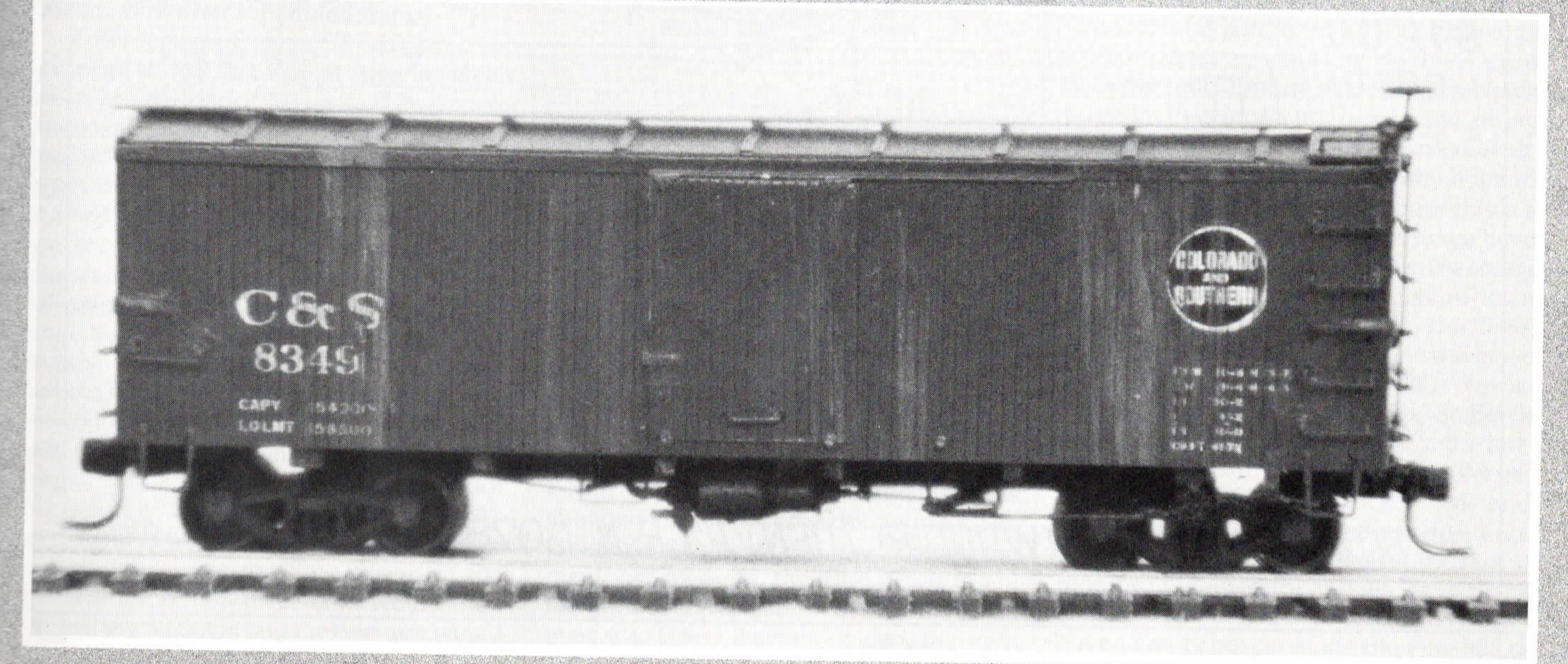
the roof ribs for the roof walk supports. These supports were made from small pieces of styrene which were glued down and sanded flush and square. The roof walk is a single piece of scribed styrene.

Next I went back and added Kadee #714, HOn3 couplers and laid out the brake rigging. I used a Cal-Scale brake set and followed the diagram which came with the set. I used a piece of styrene strip to extend the linkage arm so the rod and chain could be connected as per C&S practice. Grandt Line trucks were used.

My car was primed with a coat of Floquil

Primer and painted with two coats of Floquil Box Car Red. Each coat was allowed to dry for 48 hours. The car was lettered with Micro Scale decals and sprayed with Testors Dullcoat and allowed to set for 48 hours. Weathering was applied with a brush and dirty thinner.

The finished box car won third place in freight cars at the NMRA-PNR Regional convention in Eugene, Oregon in 1983. Building this car in styrene has shown me just how easy it is to work with this material. I plan to build many more styrene cars.



Roy's Train World

Arizona's largest selection of model railroading supplies. We are exclusively trains.

Open M. T. W. F. 9 – 5:30, Th. 9 – 9, Sat. 9 – 5 MC/VISA accepted



1033 S. Country Club Dr. Mesa, AZ 85202 Phone: (602) 833-4353

Finescale Models

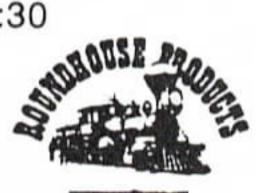
Authorized Dealers for:
Triangle Scale Models • Overland Models, Inc.
Athearn, Roundhouse • Precision Scale Co.
Grandt Line • Tomalco • P-B-L

PLUS

We stock all major brands.
Complete line of R/C planes, boats, cars
"Everything in model railroads"
Sn3, H0, H0n3, & N, stock of kits, paint, parts, bldgs.
Over 100 new & pre-owned brass, locos
Mail Order/Inquiries welcome

Phone: (052) 31 4289 A.H.: 35 3277 Mon-Fri 10:30 - 5:30 Sat 10 - 1

Sun by appt.



Central Arcade Murray Street Colac, 3250 Australia



VISA

BOB ANDREWS - TOM KLING DRG ng BLACK & WHITE PHOTO COLLECTION 2 Month Limited Run

SET	ROAD	PRINT	5 x 7	п
BA 32	AND THE COLUMN TWO IS NOT THE COLUMN TWO IS	-		
	DRGng 2-8-0's	8	\$8.00	
TK 8 & 9**	Flangers	6	6.00	
TK 17	Boxcar	5	5.00	
TK 21 & 22	Derrick OP & Boom	6	6.00	
TK 23	Spreader OU	3	3.00	
TK 24	480's, Snow	8	8.00	
TK 25	470's, 480's, 490's	6	6.00	
TK 29 & 30	6500 & 6700 Series, Flat	5	5.00	
TK 32	Cumbres Turn	8	8.00	
TK 33	478 & 498, Freight	6	6.00	

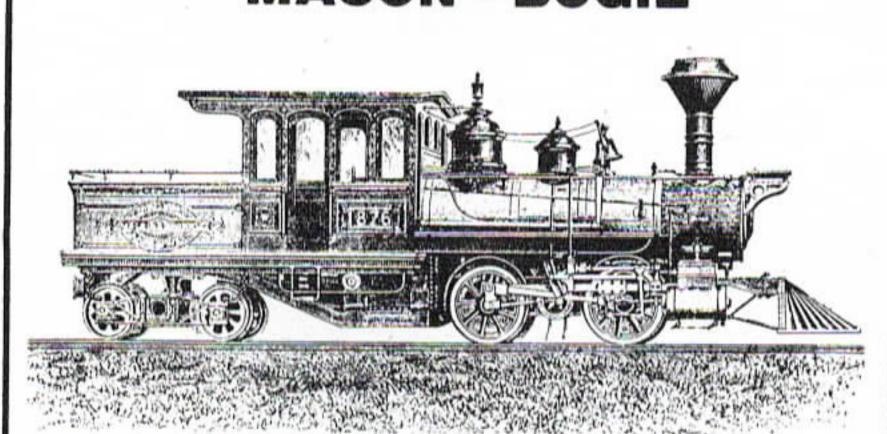
*Postcards: For sample photo, detailed list of the about additional sets and to have your name placed on the mailing list for future Limited Runs, send \$2.00. Alloweeks for delivery.

**Open order on all TK Sets.

TOM KLINGER

11735 West 38th Ave., Wheat Ridge, CO 8003

MASON - BOGIE



Engineering information and technical details on the most advanced steam locomotives of the 1870's, reconstructed and delineated to gratify the most discriminating.

WALLACE ENTERPRISES
14110 E. Progress Way, Aurora, Colorado 80015

MCKENZIE IRON (R) STEEL CO. PURVEYI TO THE LOGISING AND RAIL ROAD INDUSTRIES

READY FOR SNOW?

GET THESE PLAN SETS

'HO' 'O'
WEYERHAUSER plows & caboose \$550 \$650
MCGLOUD RIVER R.R. 2 plows . 2 flangers 550 650
JORDAN Spreader Plows (Standard) 700 850

TIMBERBEAST magazine has also done snowplows

for the Klamath Northern and the Hallack & Howard operations. Four issues \$1000

BILL ROY, P.O. BOX 3695, EUGENE, OR 97403

MINI-STRUCTURES

549 DEL NORTE AVE. CORNING, CA. 96021

29 YEARS IN O AND S STRUCTURE KITS

OVER 350 STRUCTURES KITS IN EITHER O OF SCALES TO CHOOSE FROM, IN BOTH STANDARD NARROW GAUGE.

I and G GAUGES ASK FOR SPECIAL INFORMATION

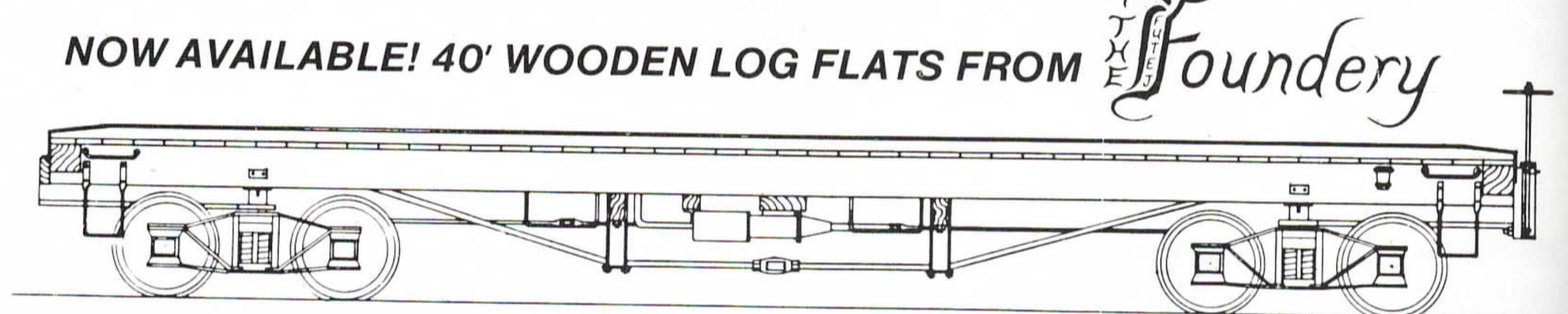
- 90 DEPOT AND STATION KITS
- 14 COALING TOWER KITS
- NATER TANK KITS
 ROUNDHOUSE KITS
- 91 TRACK SIDE STRUCTURE KITS 13 TURNTABLES KITS
- 18 TRESTLE AND PORTAL KITS
- 30 BRIDGE KITS 30 MISC. STRUCTURES KITS ASK ABOUT CUSTOM BUILDING

SEND SASE FOR KIT LIST AND INFORMATION.
OR PHONE (916) 824-1231

CHEAT RIVER COAL & LUMBER CO.

WE MAKE YOUR LOCOMOTIVES RUN AS WELL AS YOU MAKE THEM LOOK precision mechanism work including motors, gears and complete drive trains locomotive chassis modified & rebuilt—custom designed and built drives available shays and geared engines our specialty

\$12.00 each



FOR MODELERS OF EAST COAST LOGGING—THE ONLY MODEL AVAILABLE OF THE 40' WOODEN FLAT CARS USED AT CASS, WV BY GREENBRIER, CHEAT & ELK; WEST VIRGINIA PULP & PAPER CO. AND MOWER LUMBER CO. THESE KITS FEATURE A CAST METAL UNDERFRAME BY WALKER MODEL SERVICE, STYRENE SUPERSTRUCTURE WITH DETAIL PARTS BY GRANDT LINE, DETAIL ASSOC., CAL-SCALE, TUTTLE IND. AND PRECISION SCALE

COMING SOON: Mower Lbr. Co. Camp Car Kits, Decal sets for the W.Va. logging roads, including GC&E, Mower Lbr., Meadow River Lbr. and Ely-Thomas

P.O. BOX 289/23 RICHWOOD PL./DENVILLE, N.J. 07834 /201-627-5460

NJ residents add 6% sales tax

shipping: \$1.50 per order

hours by appointment

Down in the Station, Part 2

by Rick Steele

To most people, the word "operator" means a voice on the other end of the telephone. But when a railroad gives the title "operator" to an individual, that individual has quite different responsibilities than those of the familiar telephone operator.

In the days before centralized traffic control, radio communications, and the fervor of the railroads to do away with the human element in railroading, the operator was the direct link between the dispatcher and the train operating on the line. In order to explain the duties of an operator I will take you on an imaginary trip up Clear Creek on a train leaving Denver for Black Hawk and Central City. I have chosen Clear Creek because most of you are familiar with this line from reading Harry Brunk's excellent series in the GAZETTE.

The time is 1922 and the operators are located at Denver, milepost zero; Arvada, milepost 7.62; Golden, milepost 15.87; Forks Creek, milepost 28.71; Black Hawk, milepost 36.12; and Central City, milepost 39.79. The average distance between these locations or "blocks" is 6.3 miles.

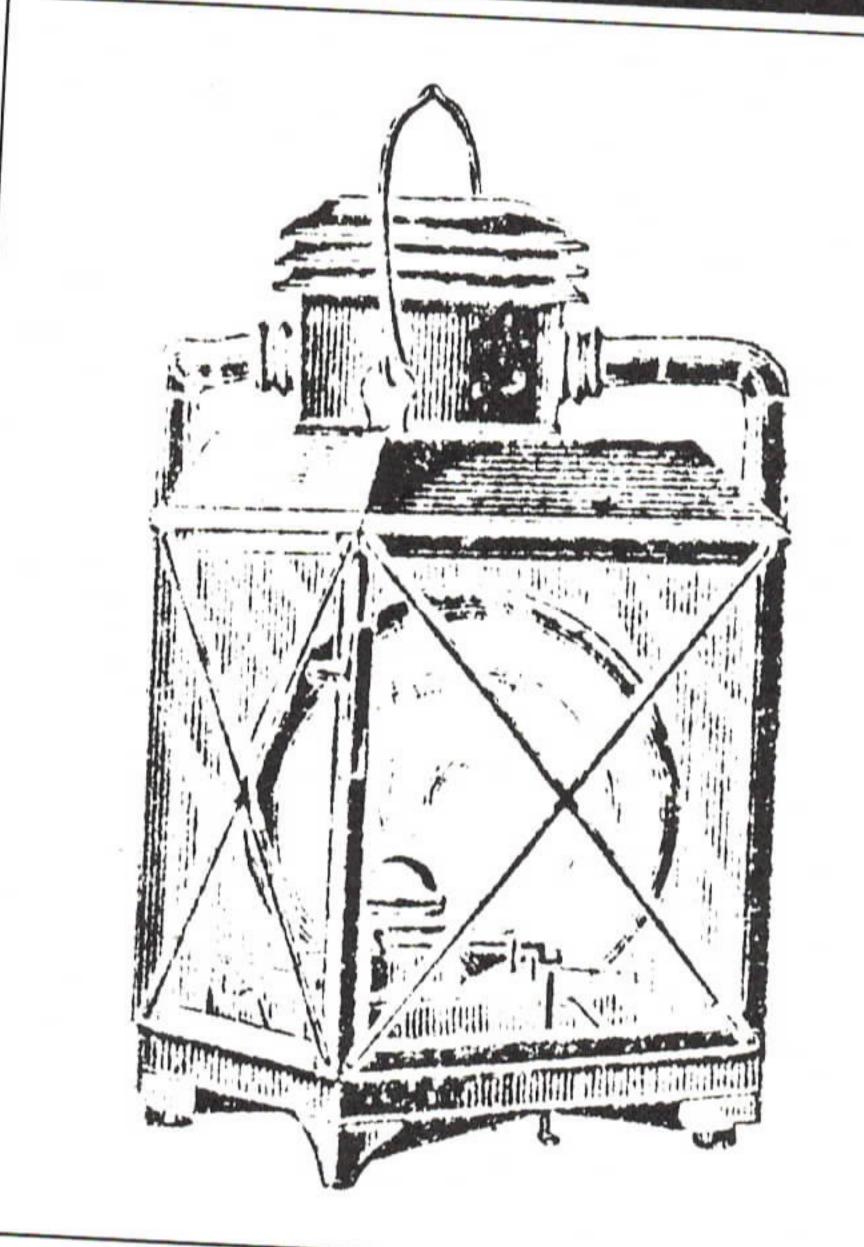
Our train is #53, a first-class passenger train leaving Denver at 3:15 p.m. daily.

Number 53 generally left with two locomotives, no matter how many cars were in the train. The day of our imaginary journey is no exception and the operator in Denver has given train orders and clearance to each engineer, the conductor and the rear brakeman of the train. The employees' timetable governs the departure time and the various meeting points and times of meets with other scheduled trains.

After leaving Denver at 3:15 p.m., we proceed to our first stop at Arvada, which we reach on time at 3:41 p.m The Arvada train order board is clear (figure 1) because no orders were to be picked up. After our train had left the depot, the operator turned the train order board to display red as shown in figure 2. The Arvada operator then either telephoned or telegraphed the dispatcher and "On Sheeted" (O.S.) the train to the dispatcher. (I will discuss the terms "O.S." and "On Sheet" in a later article.) The conversation might go something like this: The operator would call and say, "Arvada O.S." The dispatcher would reply, "Go ahead, Arvada." The operator would say, "Train 53, no signals, in 3:41 p.m., out 3:42 p.m., over." The operator would then write the time down on the proper form. The dispatcher would then repeat the message and the operator would

reply, "That is correct, over." The dispatcher would then say, "Dispatcher out."

Meanwhile, train #53 is speeding on, after looking for flags at Mount Olivet and Wigginton, she is due into Golden at 4:02 p.m. Right on time, train #53 rolls into Golden, with the signals on the depot displaying red as shown in figure 2. A meet was not scheduled, so there must be orders to pick up. Train #53 stops before any part of the engine or train passes the red signal and the agent hands up the orders to the engineers of the two locomotives. He gives two sets of orders to the rear end, one for the conductor, and and one for the rear brakeman. He also provides a new clearance.



In Golden there was an agent and an operator assigned on each shift to handle the trains and traffic from the Coor's Brewing Company. In smaller communities like Arvada, which had a population of only 2000 in the 1920's, one person wore both hats.

The orders for our train are to meet an extra freight, Extra #60 East, at Elk Creek. (Between 1912 and 1922 the North and South routing labels on the timetables were changed to West and East bound.) The Golden operator would have copied the meet orders from the dispatcher via a telephone conversation or by telegraph message. Upon leaving Golden, the train

would again be O.S.'d to the dispatcher by the operator in Golden.

With no delays, train #53 met train #54 at Chimney Gulch at 4:15 p.m. Since this meet is listed on the timetable, no orders were issued. Train #54 took the siding because the rule book says "Westward trains are superior to Eastward trains of the same class." A meet was made with extra #60 East at Elk Creek with the Extra taking the siding and train #53 continued on to Forks Creek.

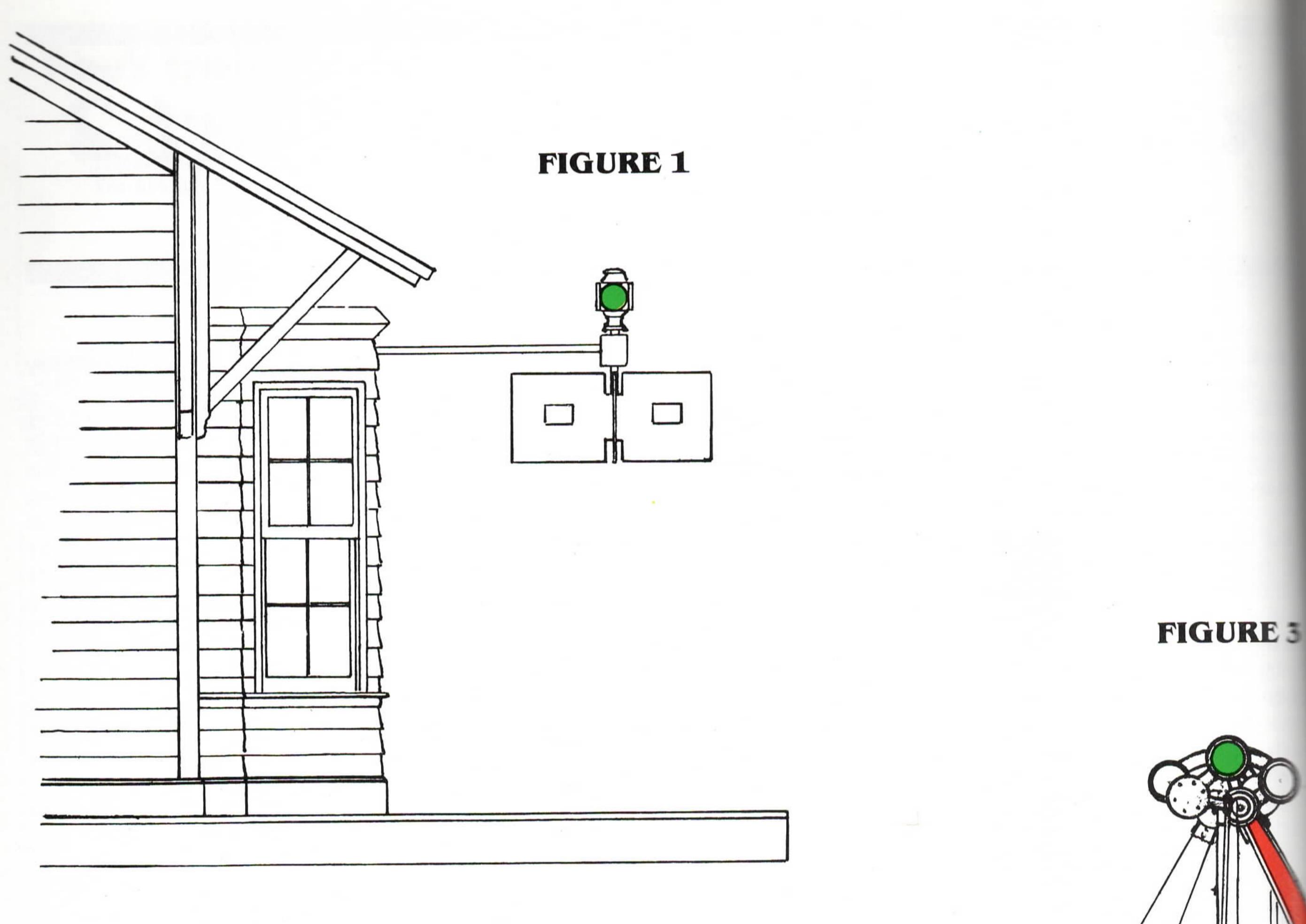
Arrival at Forks Creeks was at 5:00 p.m. The crew registered at the station by signing the Train Register Book. The register time was telegraphed to the dispatcher by the Forks Creek Operator.

In order to continue up to Black Hawk and Central City the train was split in two. Train #53 was scheduled to leave for Silver Plume continuing to use its original number. The train was too long to run in one section so two sections were run; the first displayed green markers with Central City cars, the second had Silver Plume cars. The timetable scheduled the Black Hawk train out five minutes before the Silver Plume train.

At Forks Creek, the Central City section became train #153, a first class mixed train. The operator had to prepare a new set of orders and clearance because of the change of train number. According to the train sheets this new train originated at Forks Creek. Along with the new orders the crew got a message to pick up two boxcars and a gondola left for it at Forks Creek; these were to be set out at Central City.

Our train is on time and leaves Forks Creek at 5:03 p.m. as train #153. Each time a train leaves a depot the operator must O.S. the train. On the way to Black Hawk our train develops a hot-box on the empty gondola that was picked up at Forks Creek. Since the bearing is getting pretty hot and we have no extra bearing because this is a passenger (now mixed) train and we have no caboose, the gondola is left at the siding at Smith Hill. The conductor writes down the car number (C&S 4395), the time, reason for setting the car out, and the delay it caused for the operator at Black Hawk.

We are scheduled to arrive at Black Hawk at 5:45 p.m. but because of the hotbox, we do not arrive until 6:05 p.m. We get another red board at Black Hawk and instructions on where to set out our three freight cars. The conductor gives the set out report to the operator and we leave Black Hawk 25 minutes late at 6:10 p.m. We set out an empty boxcar at the Big Fifty Mill in



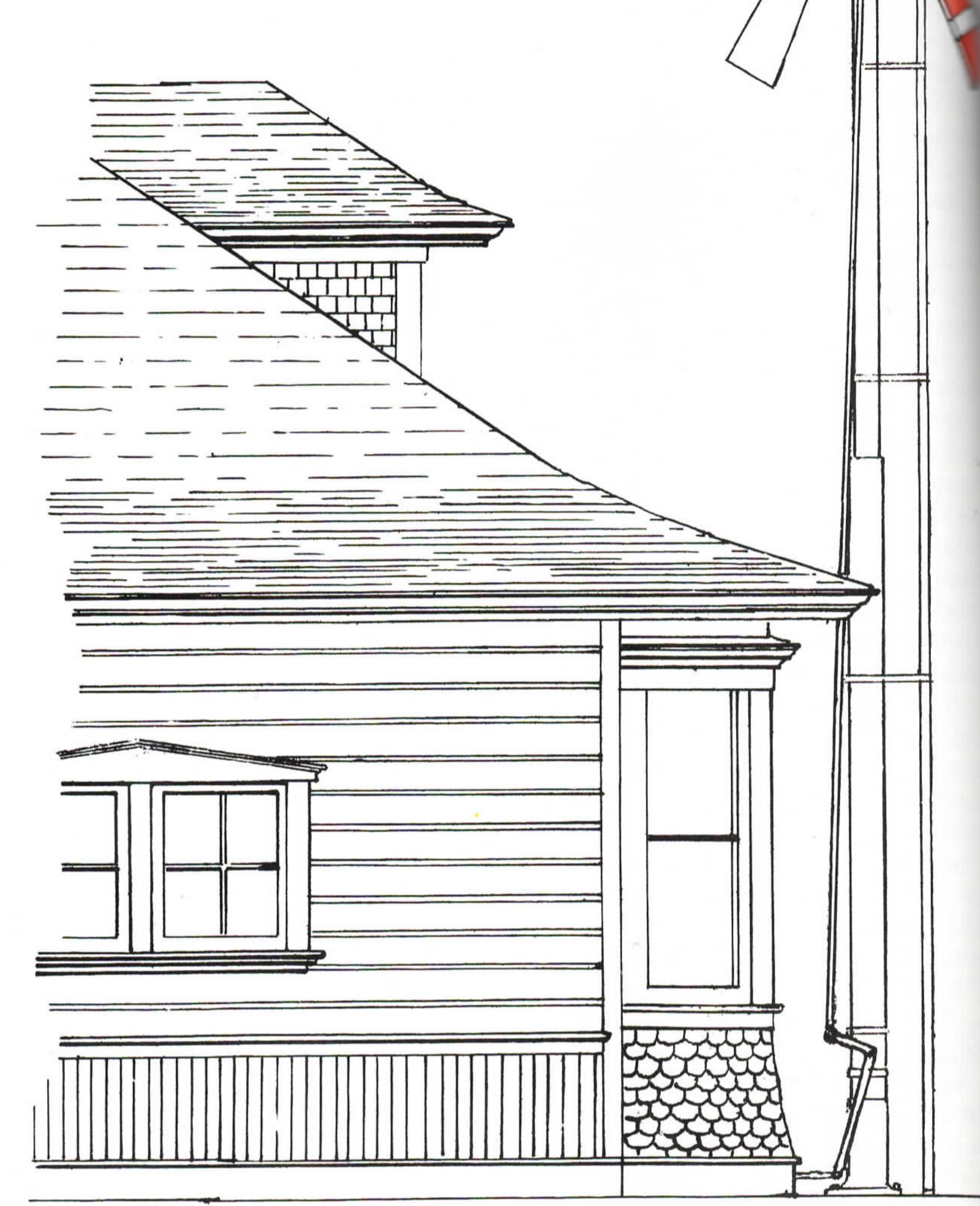
Black Hawk for concentrate loading, to go to Argo, Colorado for smelting, and proceed up the switchback to Central City. The operator O.S's our train and gives the dispatcher the gondola car number and the reason for the set out.

Since the train is now 35 minutes late we go directly to the depot in Central City. After the passengers are unloaded, we uncouple from the passenger car. The crew of train #153 then spots the remaining box car at the Sauer-McShane warehouse spur, and returns to the depot with the engine and turns it over to the night hostler. The crew then goes into the depot and signs the Train Register Book. The dispatcher is called by the Central City operator with the crew tie-up time.

Central City had no train-order board because it was a terminus and originating point for train crews who had to register in and out. In Silver Plume the station was originally built with a train-order board, but it was removed when the track to Bakerville was torn up.

The red board on a depot was also used to space trains apart, like a mechanical or electric block signal. The board was turned to red and remained in that position for 10 minutes after a train had passed it. Incoming trains stopped at the red and waited until time to turn the board.

The operator was an extension of the dispatcher. No one but the operator could report train arrivals, departures, passing trains, issue orders, and take care of tele-



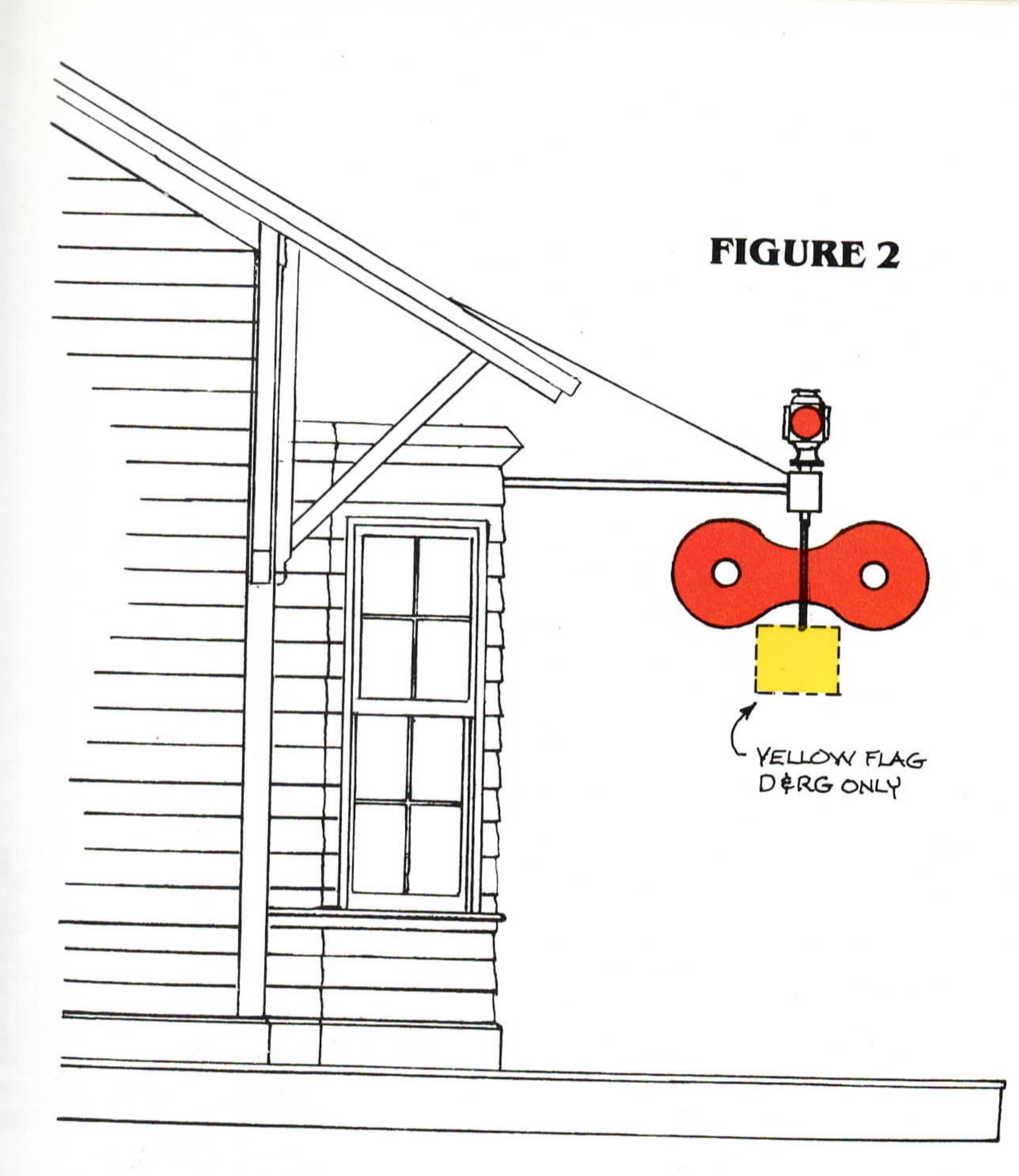


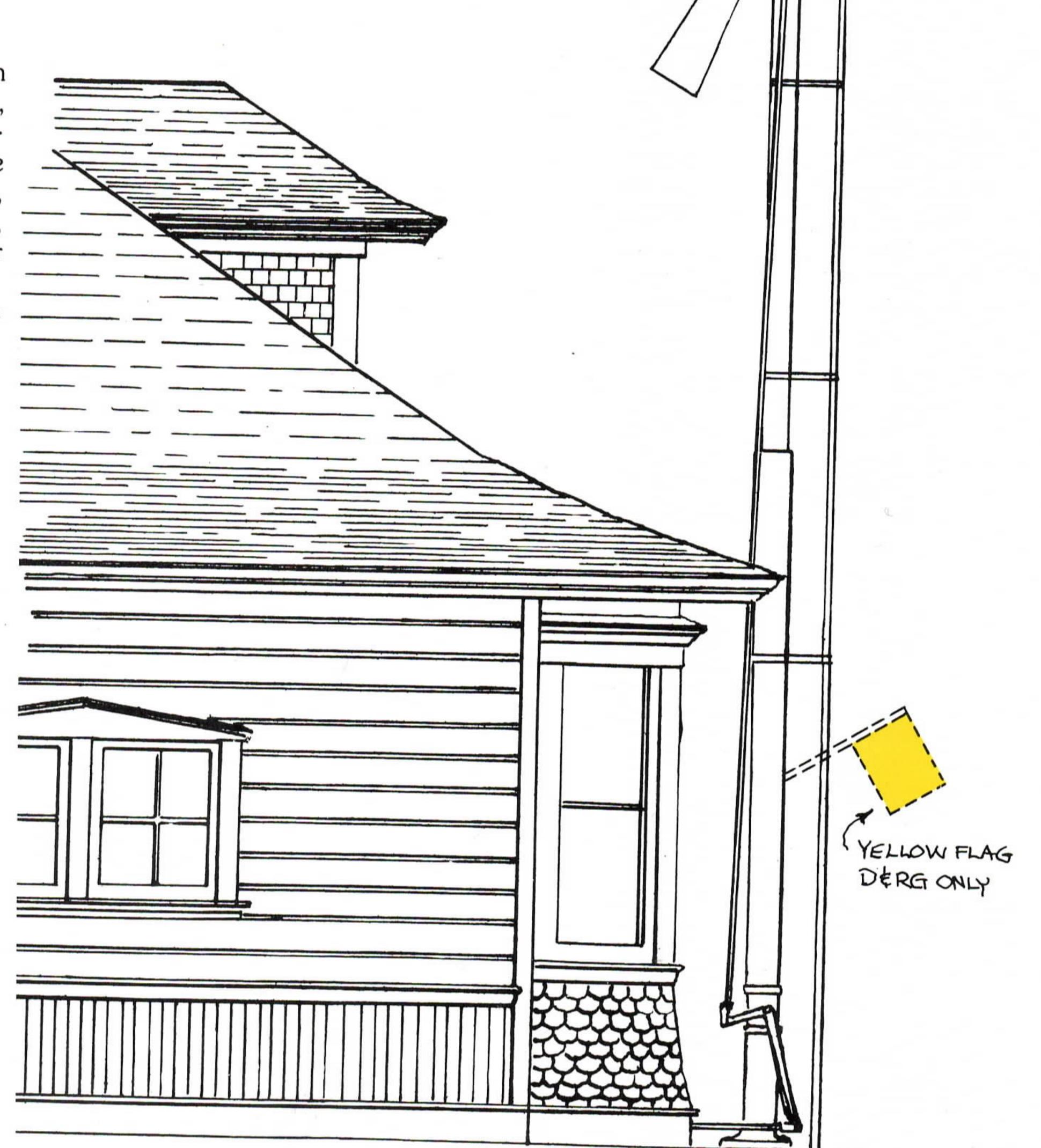
FIGURE 4

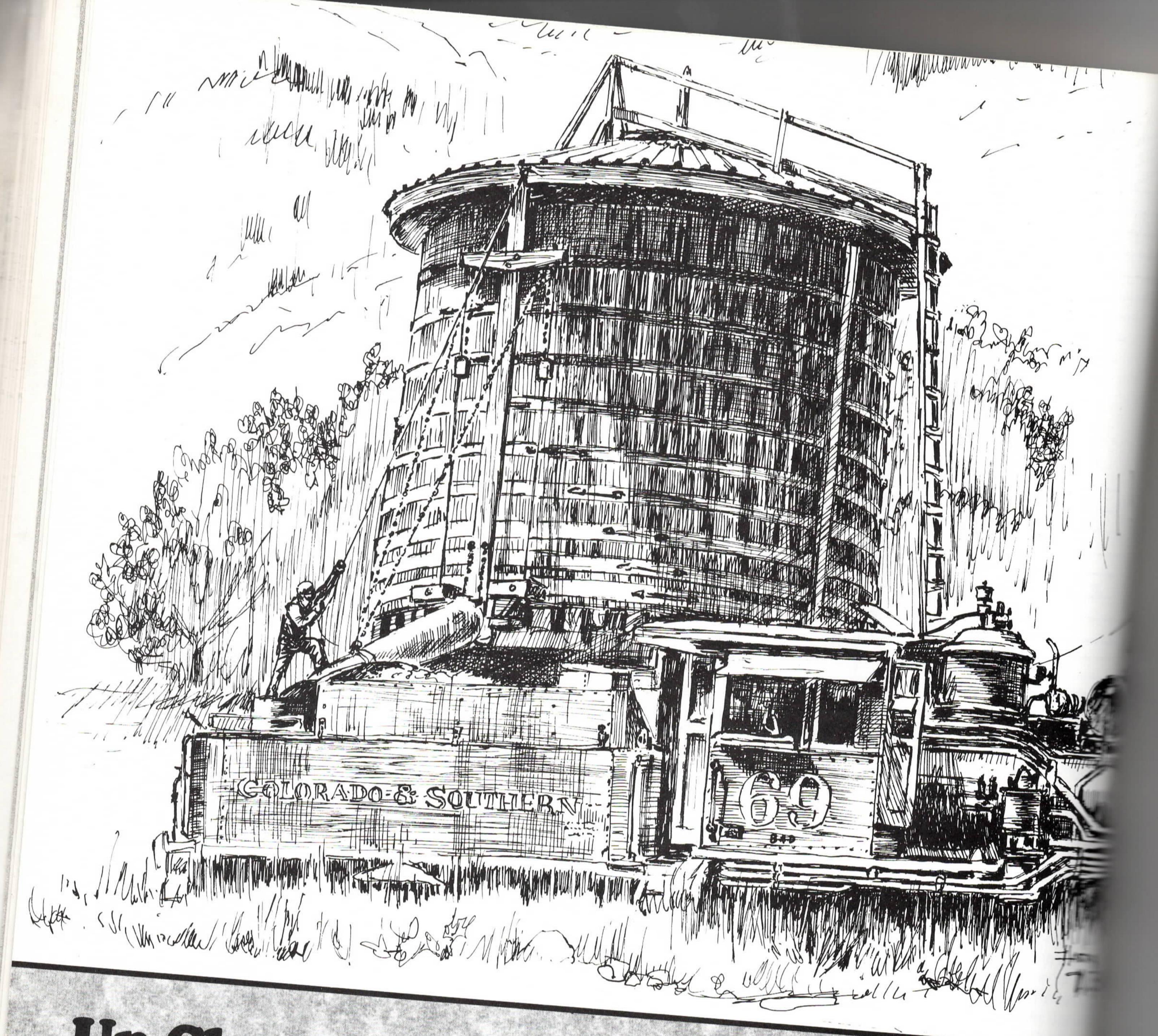
phone or telegraph switchboards. Only an operator could date, mark down the time, or record messages. If an operator was relieved by another operator he had to make a written report of all unfinished business, undelivered train orders and messages, condition of wires, position of train order signals and overdue trains.

The job of operator was a responsible one and had lots and lots of details to remember.

The job of operator was complicated by the variety of signals that might be used. The C&S used only red and green signals on their main line. Figures 1, 2, 3, and 4 show the two basic types of signal used for train orders. The D&RG used these types also, except that a yellow signal indicated that trains were waiting if the depot was not a scheduled stop. This signal indicated that the train was to slow down and pick up orders. This signal was a yellow flag as shown in figures 2 and 4. Figure 2 shows it hung directly under the paddles, figure 4 shows it hung from the signal mast.

The flag system apparently did not work too well, probably because railroaders are conditioned never to pass a red signal, and this required that they do so at least part of the time after they have slowed down for orders. The D&RG eventually went to a three-position signal. More on these next time when I will describe train orders and show you how they are written and what they mean. I will also show you some of the tasks of the dispatcher.





Up Clear Creek on The Narrow Gauge

Part 29: The Idaho Springs Water Tank

by Harry Brunk Photos by the author unless otherwise noted

Title illustration: This classic scene shows a C&S engine watering down at Idaho Springs. Kindig, Jackson, Maxwell and others photographed this scene from various angles, at different times of day, and with different engines.

Nothing weathers quite like a water tank; even the best of maintenance can never keep up with the weathering processes that water tanks are exposed to. Rain and wind and sun combine with the effects of water trying to escape to produce an effect that warms the hearts of those looking for that element we call "character." Even if you model a spick-and-span railroad, your water tanks had better show some weath-

ering for it usually only takes about hours after the paint crew has left mother nature starts her weathering

There were at least two water Idaho Springs over the years. In the days of the Colorado Central, there tank just west of the area where Tunnel was built. This tank was later years but it was near enough

Argo that I suspect that it may have been removed because it was in the way of the tunnel construction.

By the early 1920's, the only tank left in Idaho Springs was about one-half mile west of the depot. This is the tank photographed by Maxwell, Jackson, Gibson, Kindig, et. al. as engines watered down for the trip up or down Clear Creek Canyon. This is also the tank described in this article. I chose this tank because it had a number of features common to other Colorado & Southern water tanks, and it also had some unique differences from the standard tanks.

Until M.H. Ferrell's *C&Sng*, (Pruett, 1981) was published I had seen no unobstructed views of the Idaho Springs tank. In *C&Sng* I found photos by Jackson which show the supports of the tank and, lo and behold, they were round posts or poles instead of the squared timbers which were common on the C&S and other railroads. After seeing these photos, I placed my UC&N tank on tapered poles.

Then some photos arrived from the W.A. Gibsons (both senior and junior) which showed me that not only were the poles round, they were actually made of cast metal and had rather fancy metal supports. The 1939 photo (shown here) by W.A. Gibson, Sr. answered one question for me while raising another. Any doubts I had about the cast iron supports were put to rest because they show clearly in the photo, but what is the fireman doing? It may be common knowledge that the hoses coiled around the sand domes of most C&S locomotives were used to thaw out frozen water valves on water tanks, but this photo turned on the light for me. The fireman is using the hose coupled up to the steam valve on the front of #68's steam dome to thaw a valve. Numbers 60, 69, 70 (but not #65) had similar valves. These hoses may also have been used to clean up the engines themselves when they got too dirty. The photo also shows a side view of the tank's water spout and counterweight rigging.

The cast iron supports were unique to the Idaho Springs water tank. However, on page 454 of M.C. Poor's (Denver South Park and Pacific, Reprint, Rocky Mtn. RR Club, Denver, CO 1976) there is a station list which includes a 37,994 gallon wood water tank supported by iron columns at Silver Plume. Could these columns have been salvaged when the Silver Plume tank was dismantled and used on the Idaho Springs tank?

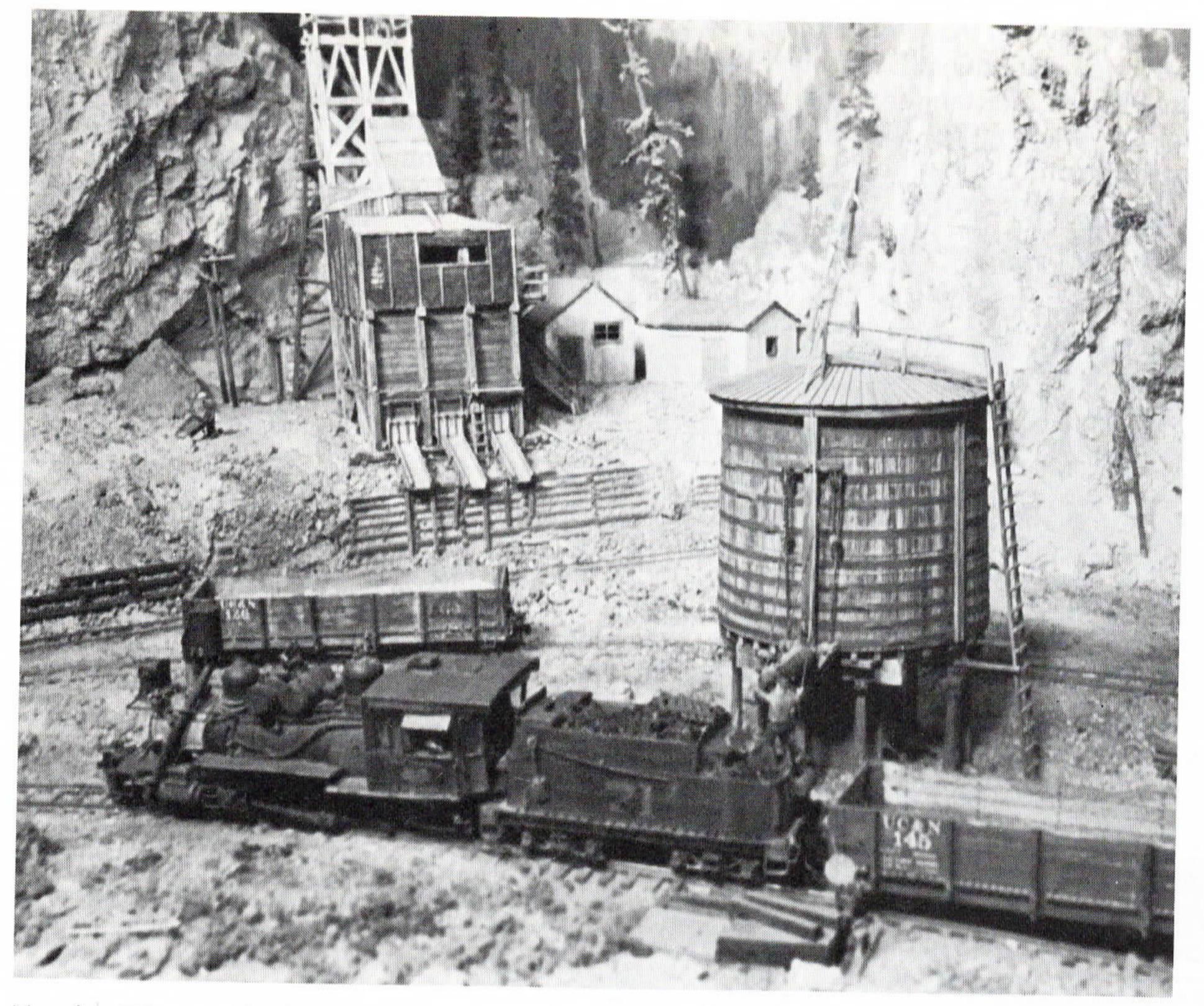
Generally, the wood frame assembly that supported the spout and counterweights were simpler on C&S tanks than on the tanks of the D&RGW and RGS. The simple, single vertical board with a short cross-piece bolted in place to support the pulleys for the counterweight chains seems to be the nearest to "standard" that the C&S used. There were many variations including additional bracing and extended vertical board varieties which appeared on the South Park division.

The tanks in the Clear Creek area also had their variations. Both the Elk Creek and Forks Creek tanks had an even simpler set-up which left off the short cross-piece and apparently had only had a single counterweight hanging directly behind the

vertical plank. The Golden and Georgetown tanks featured supports similar to the Idaho Springs tank. They did not have the rod "runners" shown on the Idaho Springs tank, and the weights hung freely from chains only. My plans show how the rods

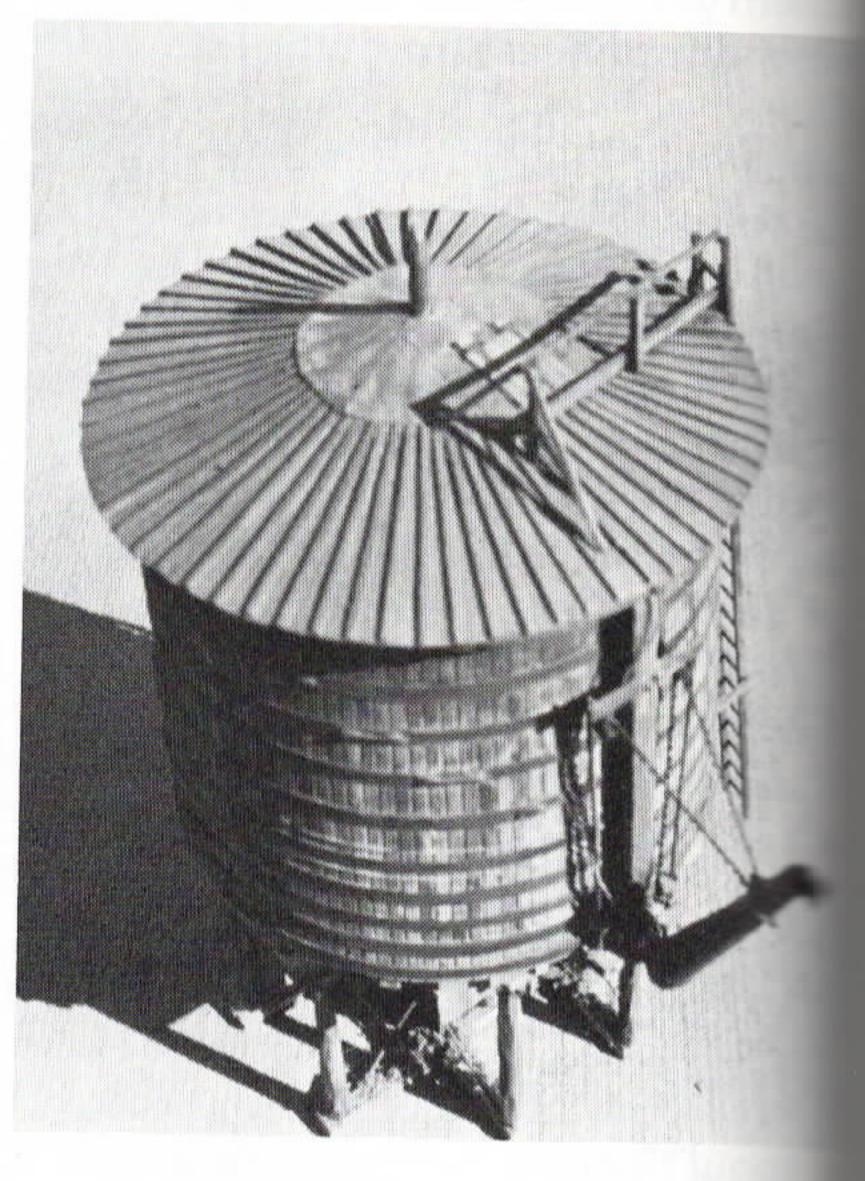


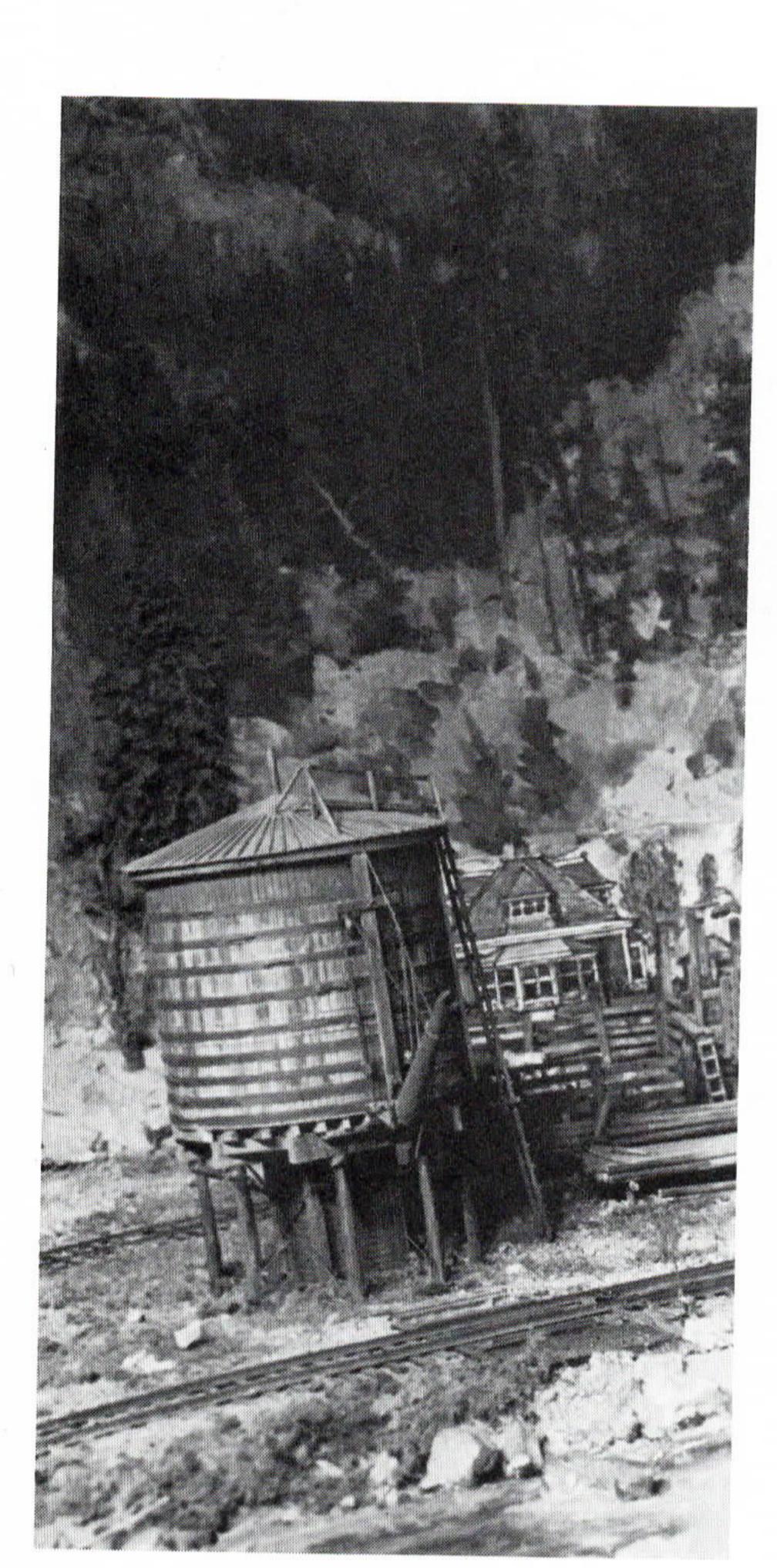
Extra #68 west makes a stop at Idaho Springs on January 30, 1939. W. A. Gibson was there and recorded this scene as the fireman used one of the hoses usually wrapped around the steam dome on many C&S narrow gauge engines. With the hose coupled to the valve on the steam dome, he is thawing the ice-clogged pipe. The cast iron supports of the water tank show clearly.



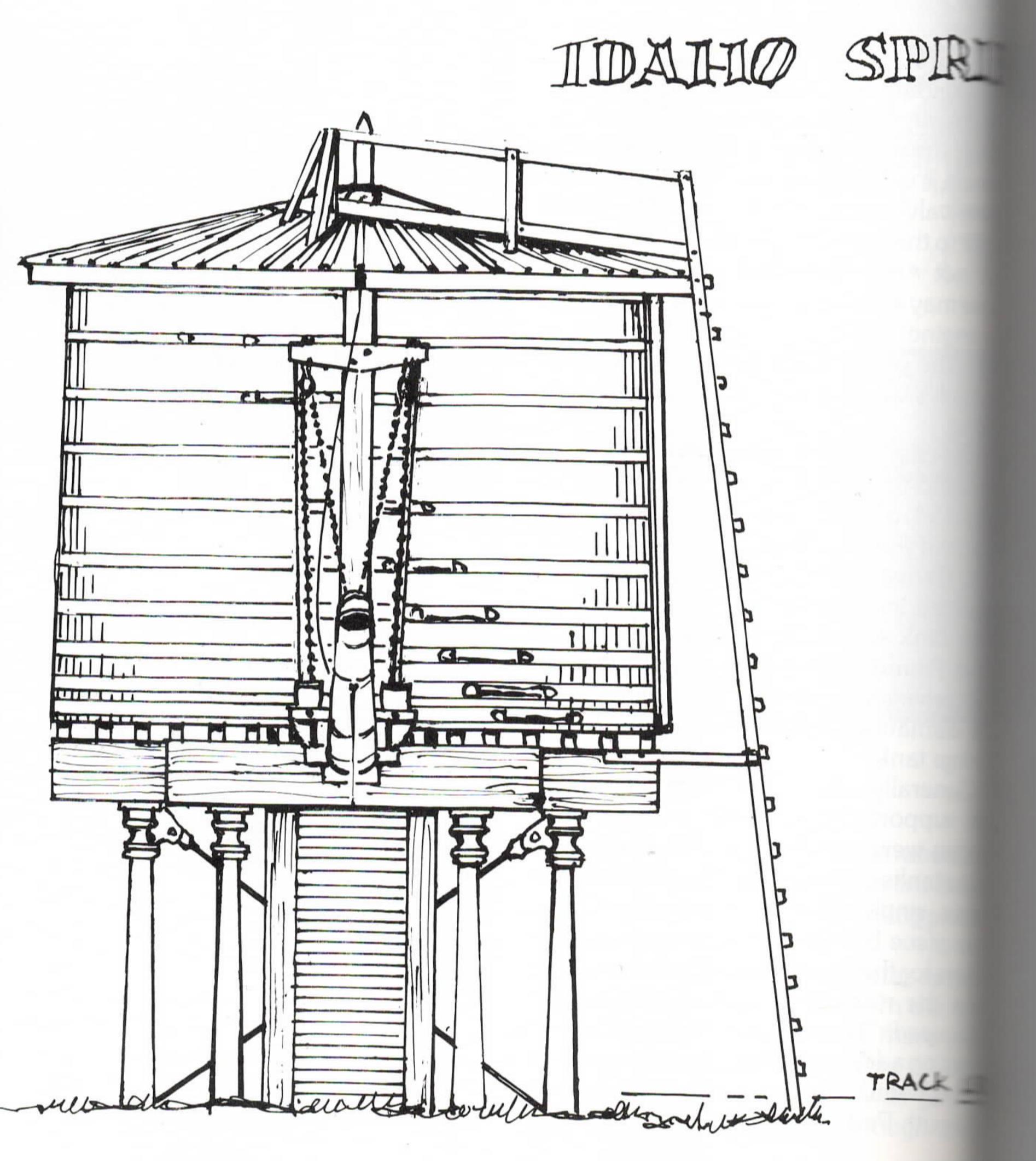
Number 71 gets a drink at the Idaho Springs water tank on the UC&N. The mine chutes beyond the tank will be featured in an upcoming segment of this series.

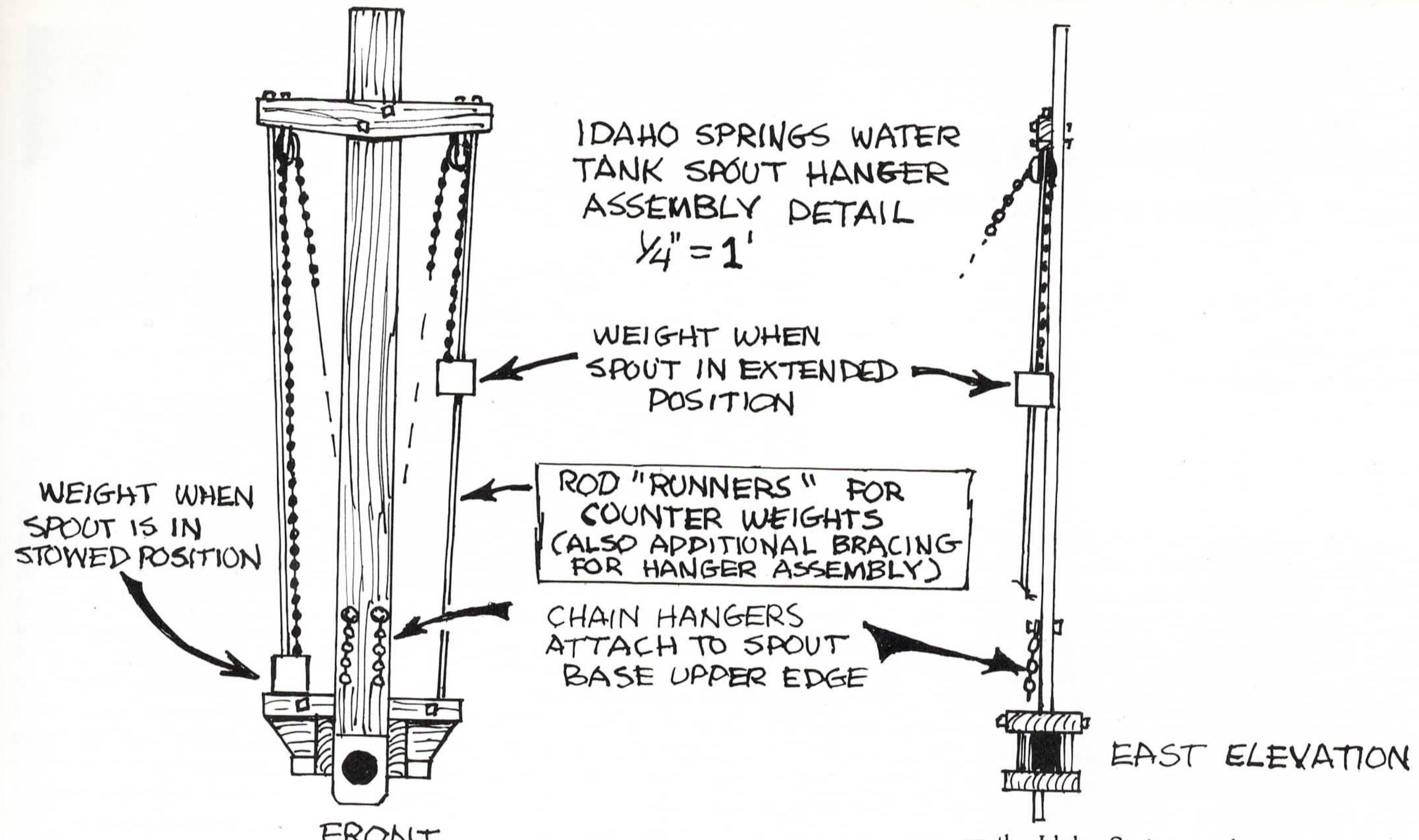
The tank roof railing. Photos of the prosphorous show that additional bracing was added the prototype as changes were being right up to the end of operations.



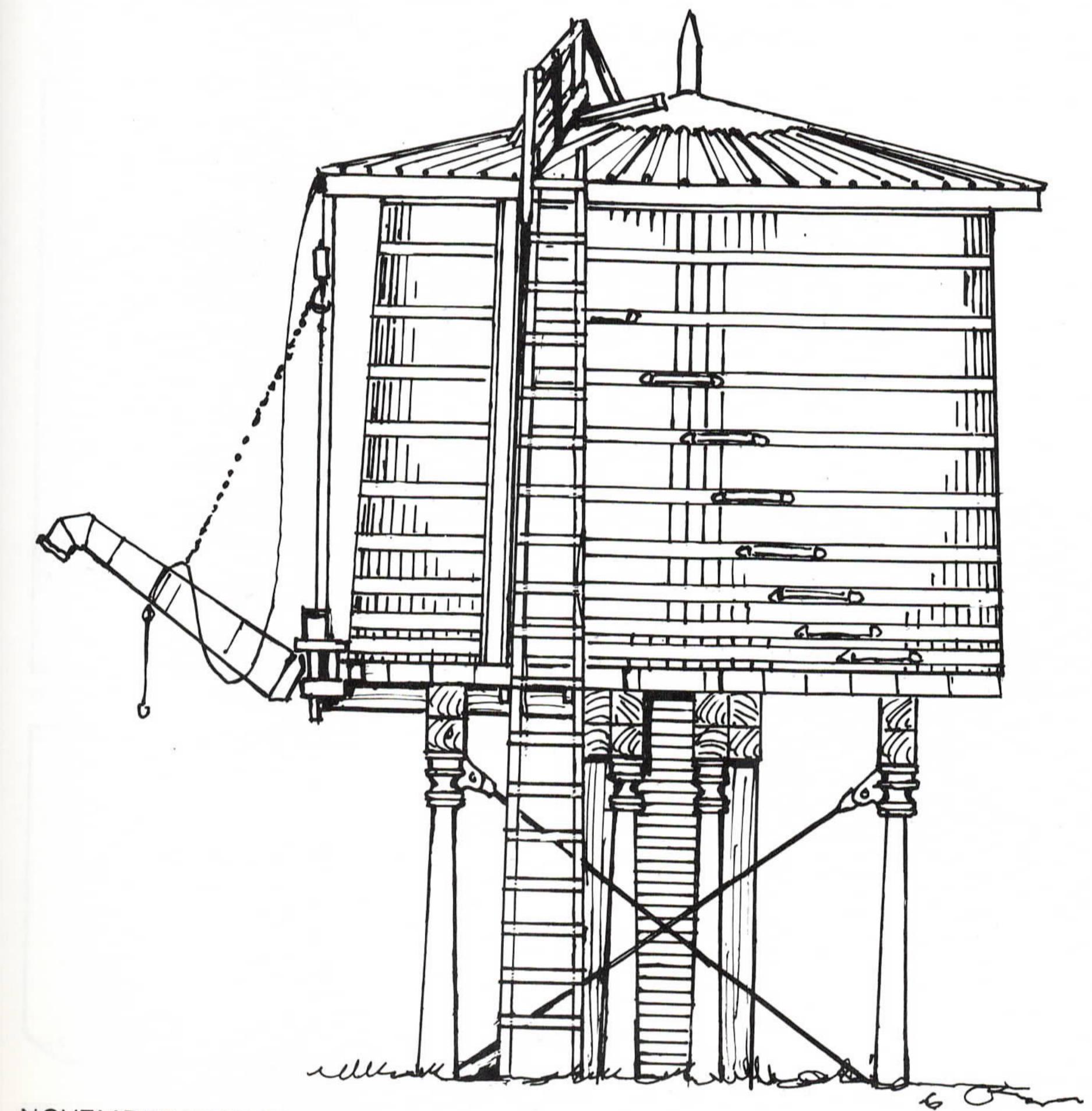


The UC&N water tank showing the tapered pole supports that were modeled before the author got the Gibson photo shown here which showed that the prototype supports were cast iron.





WATER TANK



on the Idaho Springs tank were arranged so that the weights could run up and down, thanks to the holes in the weights. These rods were for additional strength and support. At least one other tank on the C&S had these rods – the one at Waterton on the South Park line.

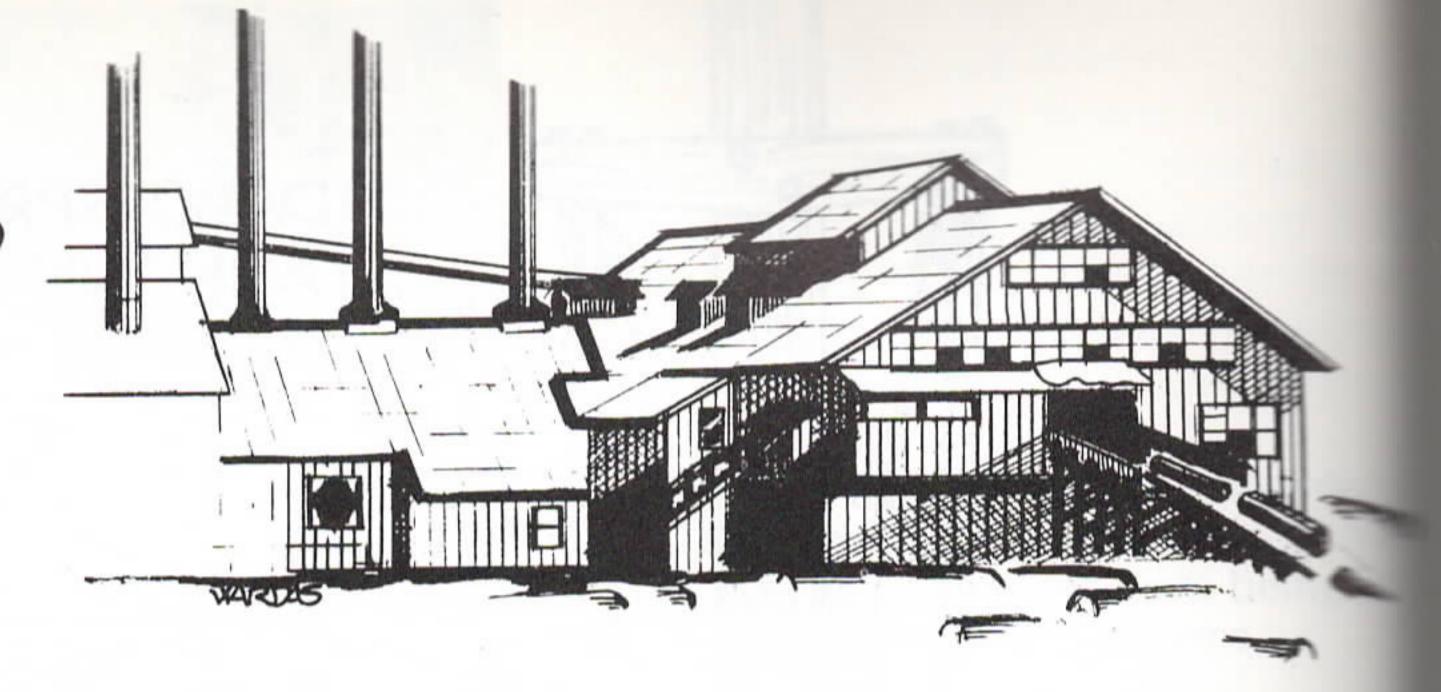
Water tank sizes, supports, and roofs also varied on the C&S. John Maxwell has copies of C&S standard specifications that feature 30,000 and 50,000 gallon tanks. The 30,000 gallon type had a 14 x 20 foot tank which appears to be the dimensions of most of the tanks on the Clear Creek line in its later years. There appear to have been a number of 50,000 gallon, 16 x 24 foot tanks on the South Park line, as well as some smaller tanks. The Maxwell specifications are dated 1910. Since many of the tanks were older than this, these standards do not cover earlier tanks. Used as a guide, these diagrams of tank supports and bracing can provide enough information for you to build all the C&S tanks you care to model.

My UC&N water tank has wooden poles for the supports because I had not seen the Gibson and Jackson photos before I built my model. Someday the tank will get its fancy castings, but for now the poles will have to do. My tank is also somewhat larger than the prototype because I used an Atlas cast tank with the rods covered up with strips of paper to simulate the bands on C&S tanks. My roof overhang was not adjusted far enough out to compensate for the slightly larger tank, and this "tight hat" appearance bothers me more in the model photos than in day to day viewing on the UC&N, so I plan no changes for now.

In upcoming installments of this column, I plan to turn to C&S cabooses, an interesting truss-rod bridge, and some mines, mills and associated buildings before I move on up Clear Creek on the narrow gauge.

THE SAWMILL CHRONICLES

Part 3: The Base and Underframe



by Reg Shaffer Photos by the author

In this article I will describe how I built the base and underframe for my sawmill. If you are following this series and building the machines as I describe them, you will need an underframe for your mill so you can install them. The blower described in the last issue is under the floor and I really couldn't tell you how to install it until I had described the underframe. It would be fun to build your underframe now and mount your machines on it as I describe them over the next few months. I will give all of my dimensions in scale feet so you can build the mill easily in any scale.

My mill is based on a plan and article from the November 1961 MODEL RAIL-ROADER by Charles Swanberg titled "Building a Western Sawmill." When I finally found this article I knew that this was the perfect mill for my railroad, particularly when I remembered that John Elwood had built this mill in HO scale and described it in the May/June 1979 GAZETTE (out of

print).

The MODEL RAILROADER article had plans for the mill in half HO scale. If you can't find this plan, you may find another you like or draw your own. Once you have your plan you will need to enlarge it to the scale you are using. I enlarged the MR plans to O scale; here is how you can get your plan enlarged. Measure a dimension on the plan and draw a line to that dimension in the scale you want your model. Then ask the camera man at a photostat shop to increase the length of that line to the length it should be in your final plan. For example, if you measure a 50-foot long dimension on a half HO scale plan and want to enlarge the plan to O scale, you merely draw a half HO scale 50-foot line on the plan and ask the photostat house to enlarge that line to 12½ inches (50 feet in O scale).

Once you have your photostat, cut out and mount the floor, ends, and sides on thin cardboard. You will need quite a large mill to house all of the C.H.B. Model's sawmill machinery; the prototype of the mill I am modeling was 111 feet by 48 feet (fig. 1), and should house everything with some room to spare.

My Timber Creek Mill sits on a base which is 2 by 4 feet with part of it extending out over part of a mill pond. The entire mill is raised up on pilings, one side faces a log

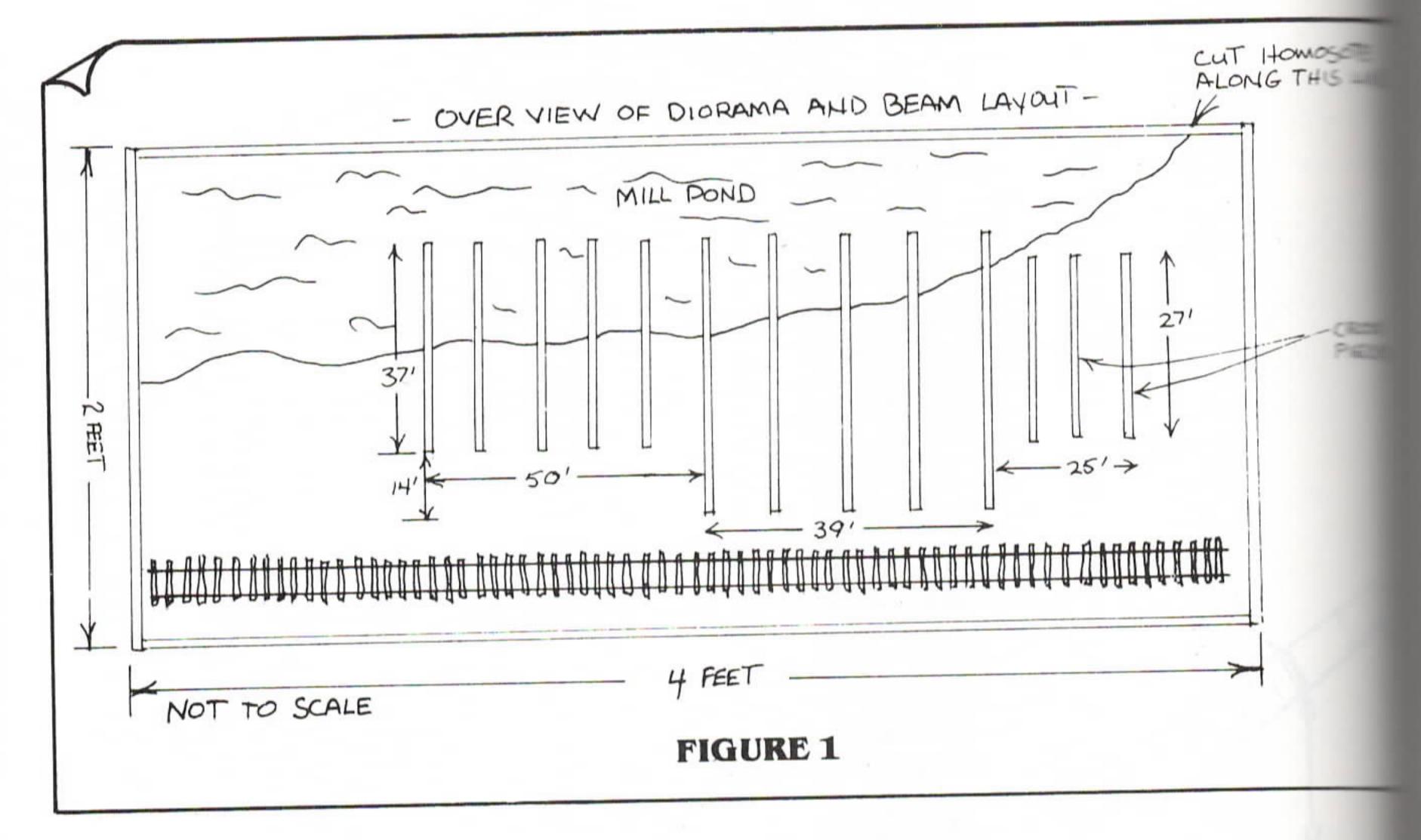
pond, and the other a track for shipping out lumber. My mill can be removed from its site so I can enter it in contests. It is built as close to the prototype as possible because I feel that it is more realistic that way.

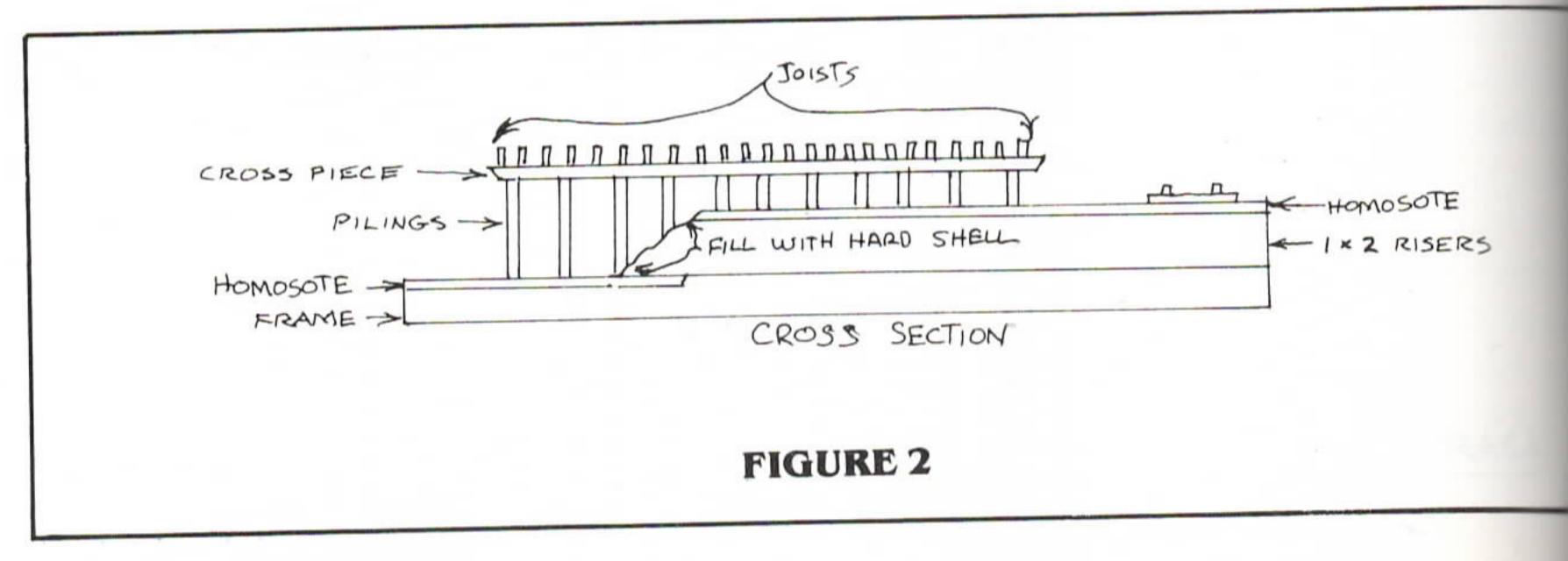
I planned and built the scenery under and around my mill before I actually started building the mill. Once I had the scenery planned I built a 1 x 2 inch wooden frame and covered the pond area with ½ inch thick Homosote. I added 1 x 2 risers as shown in fig. 2 and screwed and glued a sheet of ½ inch Homosote to the risers. I used my full size photostated plans to mark the locations of the 157 10 x 10 inch pilings in my mill. Then I laid down the ties and rail for the shipping track. The bank of the pond is hard shell made from pieces of paper towel dipped in a plaster material called Fixall. After the bank was dry, I drilled a hole for each of the pilings and glued them in place in their holes. The pilings are many different lengths and I

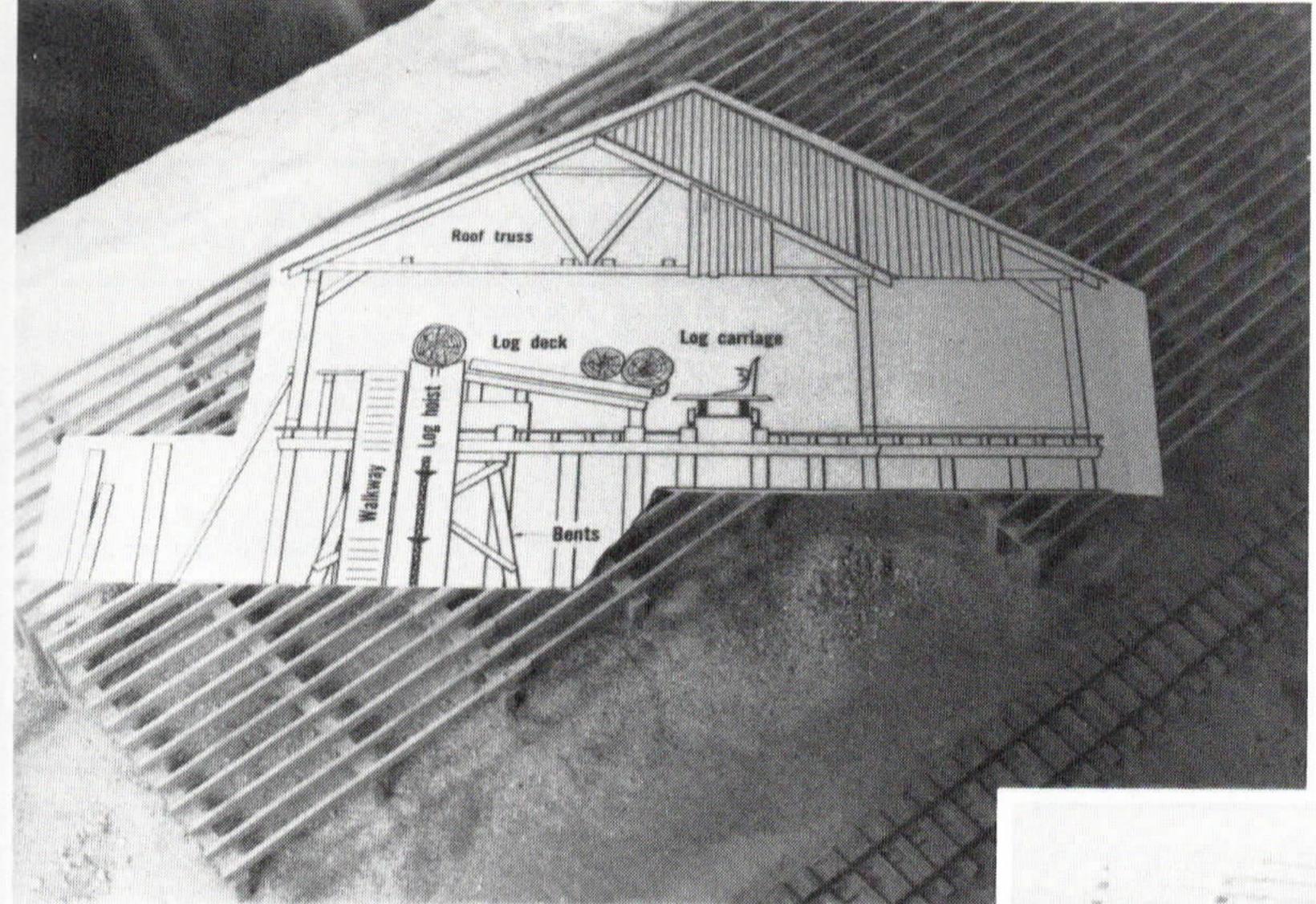
straight and at the right height. To do glued the two end pilings of each place first and used a long 10 x 10 across them as a guide for the pilings row. I did this with the first four row pilings at each end of the mill. Then my level down across these pilings to the rest of the rows. After the pilings all in I spread down the ground consome yellowish coarse sand available local garden supply stores and called fornia Gold.

My floor joists are 20 feet long inch timbers laid on end. I capped or piece of 1 x 10 lumber across each joint side but you could only capoutside of each joint because the caps will not show.

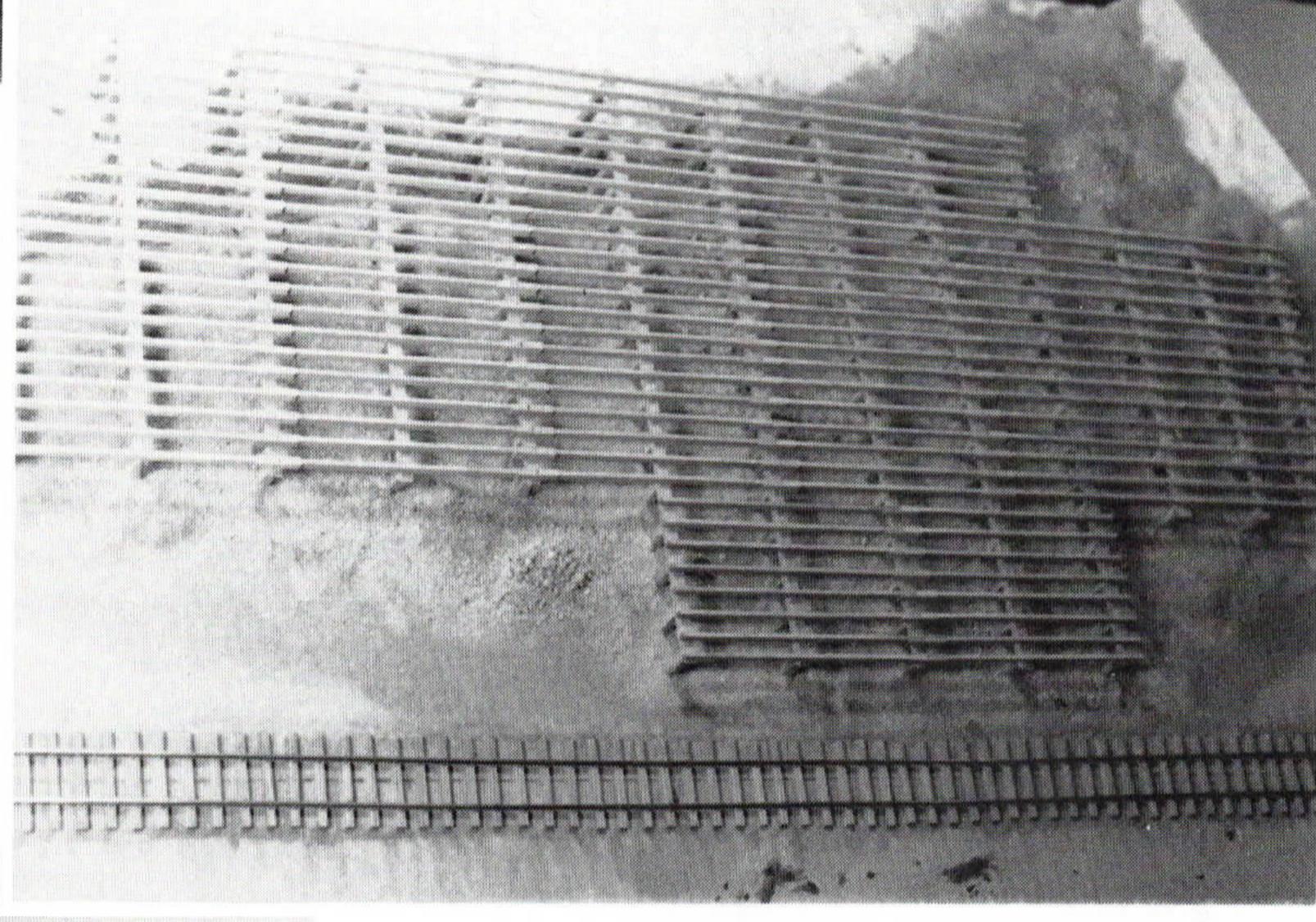
I will describe how I made my portal later article. In part 4, I will show you assembled kit WP-904, the Live Rolls next time, happy modeling.





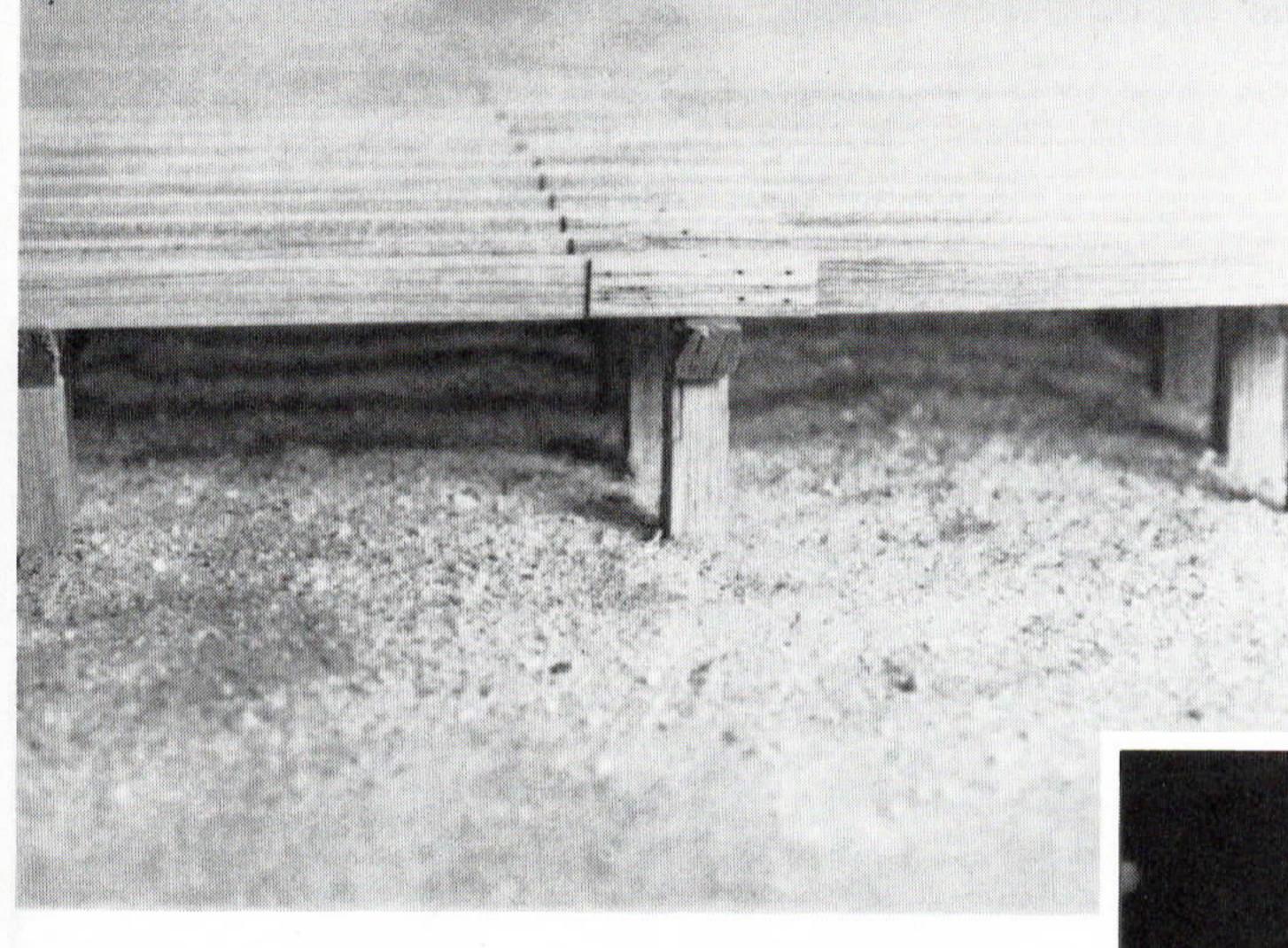


A photostated enlargement of a mill plan is mounted on thin cardboard and used as a guide in building the mill.

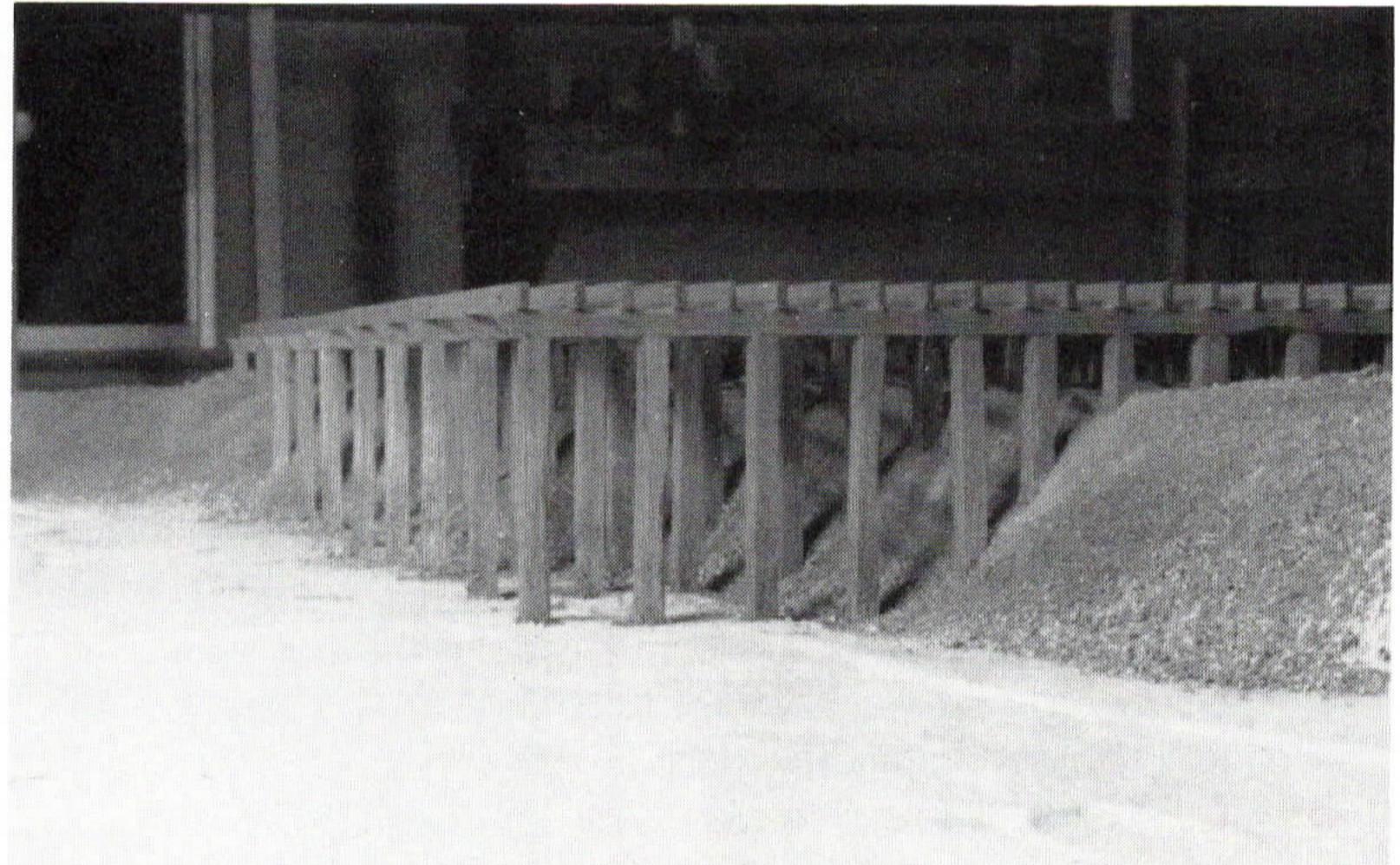


The completed mill underframe and shipping track. The pond is the white area at the top of the photo.

A pond's eye view of the mill underframe showing the piling, the hard shell pond bank and the California Gold sand ground cover.



The pilings and caps which hold the 4×10 inch joists together show clearly in this photo of the framing of the mill. Note the nail holes in the caps.



NOW... READY AT LAST! THE Sn3 C&S/RGS BOX CAR



- TSM-105 C&S/RGS BOXCAR
- TSM-100 D&RGW GONDOLA TSM-102 D&RGW FLATCAR
- TSM-103 D&RGW BOXCAR
 - TSM-104 D&RGW STOCKCAR

CASTINGS WITH BRASS CENTERSILL

EVERGREEN STYRENE BODY

GRANDT LINE WHEELS

■ TSM CAST STYRENE DOORS

TSM WHITE METAL FRAME

ETCHED BRASS DETAIL PARTS

TSM BETTENDORF TRUCKS WITH

CONSTRUCTION

TSM BRAKEGEAR

TSM 105

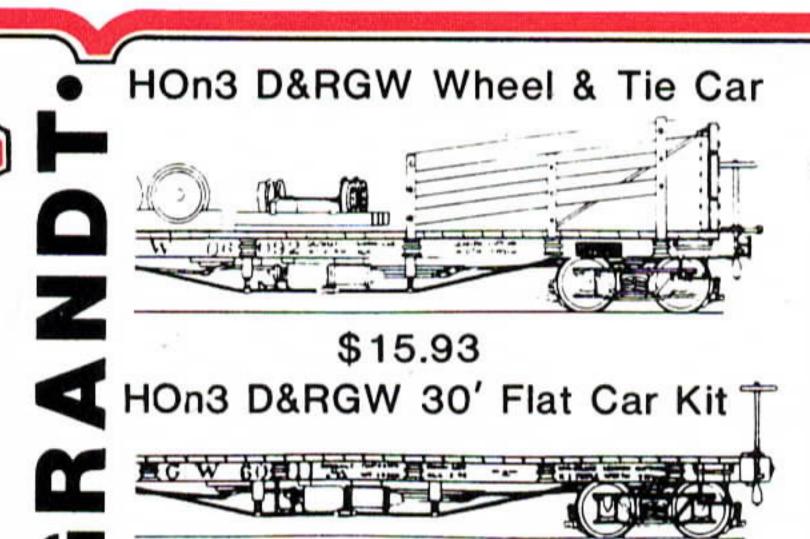
THINFILM DETAILS

KADEE COUPLERS INCLUDED IN ALL CAR KITS

SEND SSAE FOR LIST OF STRUCTURES. DETAIL PARTS, Sn3 CAR KITS, TRUCKS, ET

TRIANGLE SCALE MODELS

P.O. BOX 8483 LONG BEACH, CALIFORNIA 90808



4 Kits for \$48 or \$14.50 Each

NEW KIT!

On3 Fairbanks-Morse #37 Dump Car Kit Buy 4 and get one FREE! \$48 or \$12 each

On3/On30/On2 (specify gauge when ordering)

Buy 4 and get one FREE!

\$40.00

Koppel Dump Car

On3 Passenger Car Kits \$36.75 each

- #215 D&RG Baggan
- #216 D&RG Comb
- #217 D&RG Coach
- #218 D&RG"Alama
- #219 RPO-Baggan
- #220 Vest. Coach Out of Production Quanities Limited

DISPLAY CASE KITS

PIECES - CUT TO SIZE FOR

FOR SMALL DIARAMA SCENE

CARS, TRAINS, MINIATURES

6×3 3

10×3 3

15×3 3

10×5 =

15×5 =

22×5 =

10×8 =

USED FOR DISPLAY MODE.

SMALL SHIPS & PLANES

● 1/8" CLEAR ACRYLIC CASE

EASY ASSEMBLY

500 SO. BROADWAY, DENVER, CO 80209-4002

(303) 777-6766

One of the Nation's Largest Train Stores

SHIPPING: USA orders over \$50. NO CHARGE, (unless bulky), under \$50. add \$2.50 postage & handling.

WE accept all 5 major Charge Cards.

Coming in Sn3!



The C-18's

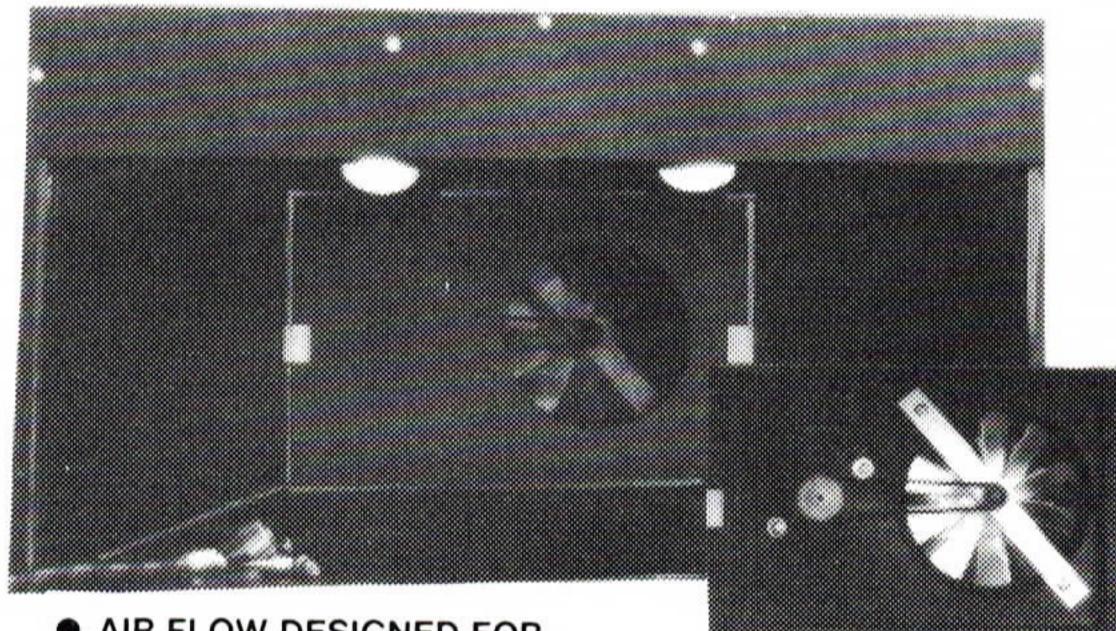
Three different versions featuring:

- Full Cab Interior
- Operating Valve Gear
- Coined Wheel Centers
- Prototypical Gearing
- Accurate Engineering
- Many new exciting parts
- Modest Price! (Under \$450)

Send \$1 for the latest issue of The Sn3 Dispatch

P-B-L, Dept G, Box 749, Chama NM 87520 (505) 756-2419

Hobby Spray Booths



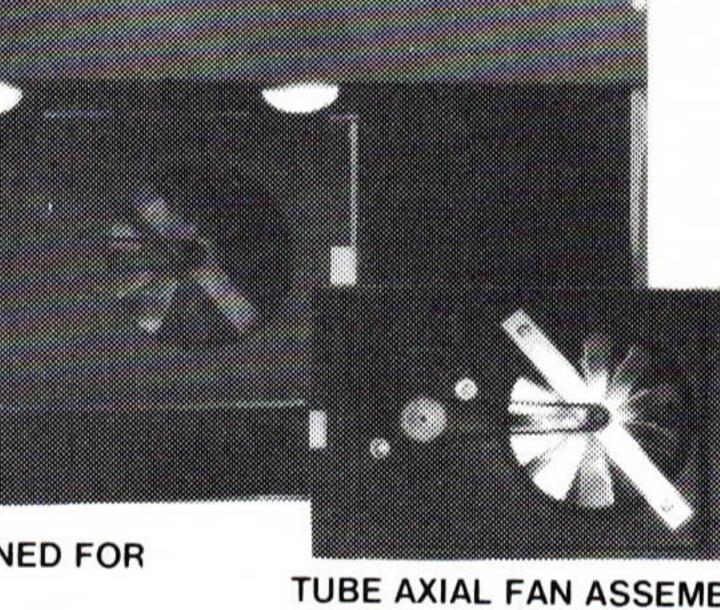
 AIR FLOW DESIGNED FOR AIR BRUSHES

 BUILT IN LIGHT SOCKET (BULBS NOT INCLUDED)

 BECOMES A CURING OVEN BY ATTACHING FRONT COVER (INCLUDED WITH BOOTH)

 EXHAUST OUTLET SIZED FOR 4" DRYER VENT TUBE

SL 2 23 · 12 · 11 89.95



TUBE AXIAL FAN ASSEMBLY W/ELECTRICAL REMOVED FROM AIR STREAM

(MOLDED ABS)

1.75 - 10

DISPLAY BASES

Dealer and Distributor Inquiries Welcomed

VALUE PRICING

290 NORTH BENSON AVENUE, UPLAND, CALIFORNIA 91786 (714) 946-1720



NARROW GAU AND SHORT LI	IGE CAZETI					
Handy Forms	and Other Good St	tuff				
Note: If you can't bear to cut up your GAZETTE (heaven forbid), photocopy the form or send us a letter.	Subscription Order Form			NEXT ISSUE PREVIEW		
Send all correspondence to: Benchmark Publications, P.O. Box 26, Los Altos, CA 94022.	ADDRESS			Joe Crea describes his ½ inch scale G-gauge C&S #22.		
SUBSCRIPTION RATES (1 Year, 6 Issues) United States: \$15.00	My check for \$	STATE ZIP is enclosed. val subscription				
\$30.00 1st Class Mail Foreign (including Canada), U.S. funds please): \$20.00 Surface \$30.00 1st Class, Canada	Gift Subscription Order Formation TO: NAME	rm	FROM: NAME			
BACK ISSUES: \$2.75 each sent 2nd class postpaid. Allow four weeks delivery. Overseas \$3.00 each, surface (U.S. funds, please).	ADDRESS		ADDRESS			
	My check for \$	STATE ZIP is enclosed.	CITY	STATE ZIP		
NAME ADDRESS		Gauge, A Small CV&T Brill Coach MAY/JUNE 1 Trenches, A Tour	Cars', Dynatrol, Co. Oil Facility, Centra Interior Detail. 1983 – Freight Ope through Little Hele	Inexpensive Diesel Conversions, Colorad lorado Aspens, The Southern Pacific Nar I City, Colorado Buildings, The Argo Tunerations on the NPC, Smelters, Baldwins in Mill, The Idaho Springs Depot, Work Ro	row inel,	
Ay check for \$ Please send the issues check below.	STATE ZIP is enclosed.	Efficiency, Central City Industries, A Small Sanding Facility. JULY/AUGUST 1983 – The Mill on Trout Creek, The Keystone Copper Mine Work Motor, The Colorado and Southern, The DSP&P Facilities at Alpine, Installing Sound in the Grandt Porter, Logging in Oklahoma, 16mm Railcar, Central City, Alley Views of Idaho Springs, F&CC Caboose, V&T Gold Hill Station, A Branch Line Coaling Station.			lling City	
MARCH/APRIL 1980 NOV/DEC 1980 JULY/AUGUST 1981 SEPT/OCT 1981 SEPT/OCT 1981 NOV/DEC 1981 SEPT/OCT 1980 MARCH/APRIL 1981 NOV/DEC 1981 SEPT/OCT 1980 MAY/JUNE 1981 JAN/FEB 1982 MARCH/APRIL 1982 - Pilar Point Marine Railway, Turning a Smoke Stack, Track, Track, Track, Scratch-Building Wooden Passenger Cars, A Small Anthracite		□ SEPTEMBER/OCTOBER 1983 – The Lawndale Dummy, Military Light Railways of the U.S. Army, Building an On3 Portable Air Compressor, Lumber Transfers, Railroad Right-of-Way Signs, A Baldwin Three-Foot Gauge 0-4-0T, V&T Reno Yard and Water Tank, Alpine Station, Privy, and Storage Shed, The Corner Repair Shop in Idaho Springs. □ NOVEMBER/DECEMBER 1983 – The Pacific Coast Railway, A Vintage Turntable, Positive Turnout Control, Modeling in Nn3, Brick Row of Businesses in Idaho Springs, Oklahoma Gold (oil wells), Lawndale #5, The Yorke Pool Hall Bordello, V&T Reno Enginehouse, A Stiff Leg Derrick. □ JANUARY/FEBRUARY 1984 – F. H. Stoltze Land & Lumber Co. in On3, German Military Rwys. in W. W. II, Lettering the Colorado Lines, The Kiso Forest Rwy., C&S Coal Cars, An HO McGiffert, A Poorman's K-27, Building a Vertical				
Chemical Co. Heisler. MAY/JUNE 1982 – Rails Throug Box Cars of the WW&F, The Innovative City Freight Station, Forks Crestails for a One Man Sawmill.						
JULY/AUGUST 1982 – Painting and Weathering Styrene, an English Garden Railway, Riding the Goose, The International Rwys. of Central America, Colorado Southern Reefers, Building D&RGW OV in HOn3, Building a Vintage Tractor, Build a Coal Conveyor, Converting HOn2½ Turnouts to HOn3, Artwork for Decals, Sumpter Valley #50.		Boiler, Colorado & Northwestern 2-8-0, V&T Minden, NV Station. MARCH/APRIL 1984 – The Thunder Lake Narrow Gauge, German Military Railways of World War II, Momentary Contact Sound Cam, Compressed Air Locomotives, Notes on Lettering the Colorado Lines, The Case for a Small Space, The Chooch Country Store, Thunder Lake Narrow Gauge 2-8-0 #9, South Pacific Coast Agnew Freight Station, V&T Construction Car #6				

NOVEMBER/DECEMBER 1984

Brill Coaches #11-12.

Gondola.

house.

Railway, The Mt. Tamalpais & Muir Woods, Onboard as Used by the Lake Tahoe Ry.

& Navigation Co., Building a Desk Top Layout, Tonopah Railroad 2-6-0 #1, V&T

Virginia City, Turntable, Car Shop, and Yard Layout, Quincy & Torch Lake

□ NOVEMBER/DECEMBER 1982 - The Glenwood and Black Creek, The

Hancock & Calumet, The Original Central City Depot, The Argo Tunnel, A Portable

Loading Ramp, The Huntsville & Lake of Bays Railway, Central City, Colorado

Yard, Little River Lumber Co. 4-6-2, Shoshone Depot, V&T, Virginia City Round-

☐ JANUARY/FEBRUARY 1983 – West Side Lumber Co., Heisler #2, Part 1,

Gas Mechanicals, Eureka: a Ghost Town, Black Hills & Ft. Pierre, Part 1, Argo

Tunnel: the Model, Shopping My T-12, The Central City Section House, Pilings, A

One Room Schoolhouse, A Branch Line Ash Pit, The Songo River Bridge, V&T

MAY/JUNE 1984 - Low Cost Disconnects, C&S/RGS Stock Cars, Colorado

in 1939, Mamod Kit, Paul Scoles on Scenery, Scratchbuilding a Willamette Hoist

Engine, Lighting Your Caboose, Timber Over-Bridge, Ore Processing Part 1, Durlin

Branch of the D&RGW, Archbar Trucks, V&T Carson City, Nevada Track Plans,

□ JULY/AUGUST 1984 - Sawmill Chronicles, Part 1, Modifying the Grandt

Line Porter, Head End Signals, Ore Processing, Part 2, Camp Eight, Flumes, Paul

Scoles on Scenery, Detailing the Flying Zoo Climax, The Georgetown Loop,

Scratchbuilding an F&CC Caboose, An 18-ton Climax Plan, The Idaho Springs

□ SEPTEMBER/OCTOBER 1984 - An ET&WNC Caboose, Realistic Hay

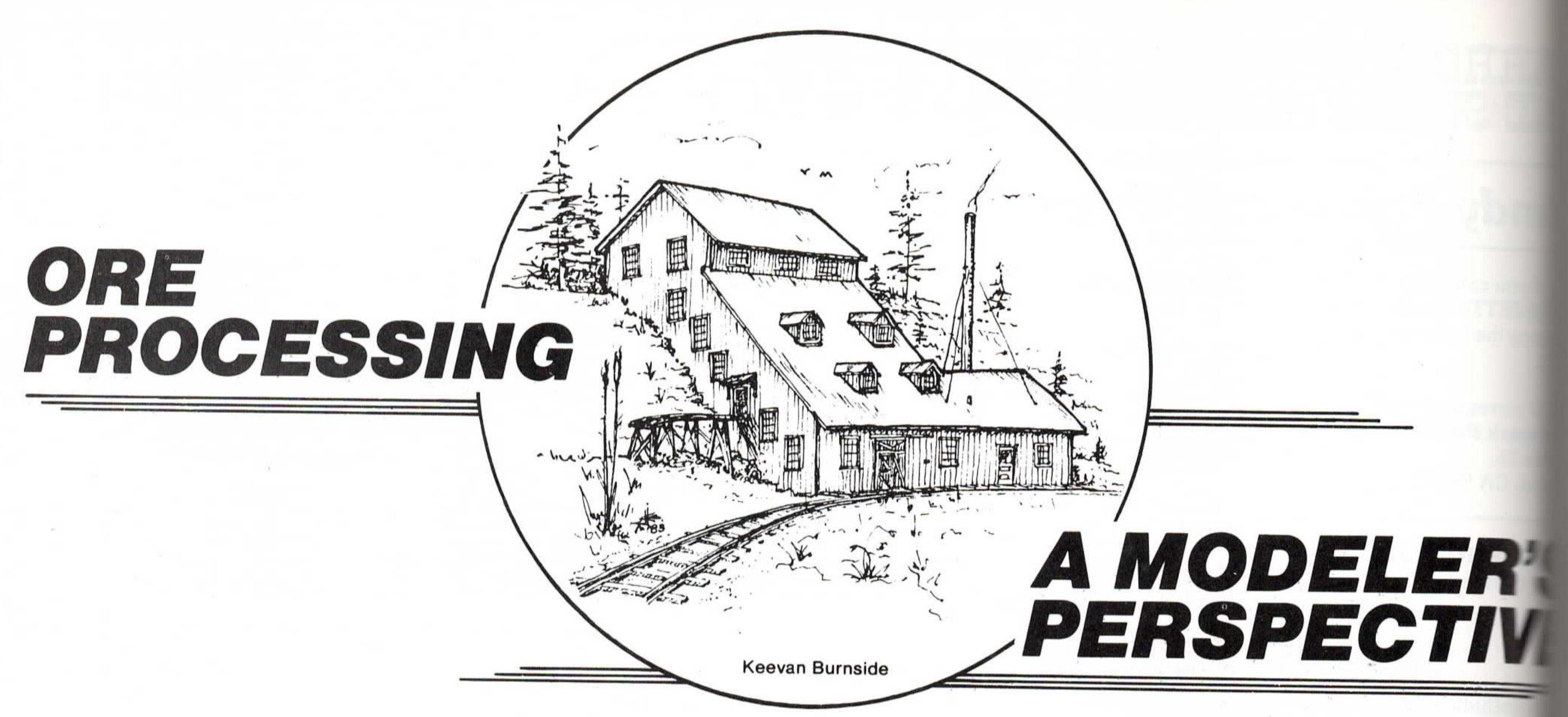
Bales, Realism with Pastel Pencils, EBT Hoppers, The Station Agent, An On30

4-6-0, Ore Processing, Part 3, The Sawmill Chronicles, Part 2, A Skewed Kingpost

Bridge, EBT Rockhill Sandhouse, EBT Mt. Union Enginehouse.

Northwestern Pacific 4-4-0 #91.

Machine Works.



PART 4: THE BASE FOR YOUR MILL

by John Hitze Photos by the

In the last issue I wrote that I would discuss bins and chutes in this issue. Instead, at the request of the editor, I am going to describe the base of the model mill itself. Bob suggested (and I agree) that it would be nice for you to have a base upon which to install the mill machinery as I describe it.

The base of a mill needs to be made out of a solid and stable material. I used Plexiglas for the base on my Little Helen Mill (May/June 1983 GAZETTE) only to find out later that Plexiglas and wood do not expand and contract at the same rate. This caused some of the wooden parts of the Little Helen Mill to warp and split when I transported the model in cold weather. The base of the mill I am describing in this series is built out of ½ inch A-C plywood pieces, glued and screwed together as shown in the figures and photos.

The layout of the base was determined by the arrangement of the mill equipment. The heights of levels three and five were set so that there would be a flat floor access to the tops of two storage bins. The heights of levels one, two, and four were similarly determined by the heights of the pieces of equipment on these levels. The dimensions of the horizontal floor areas were determined by the size of the equipment with a reasonable amount of space added around each machine for a work area.

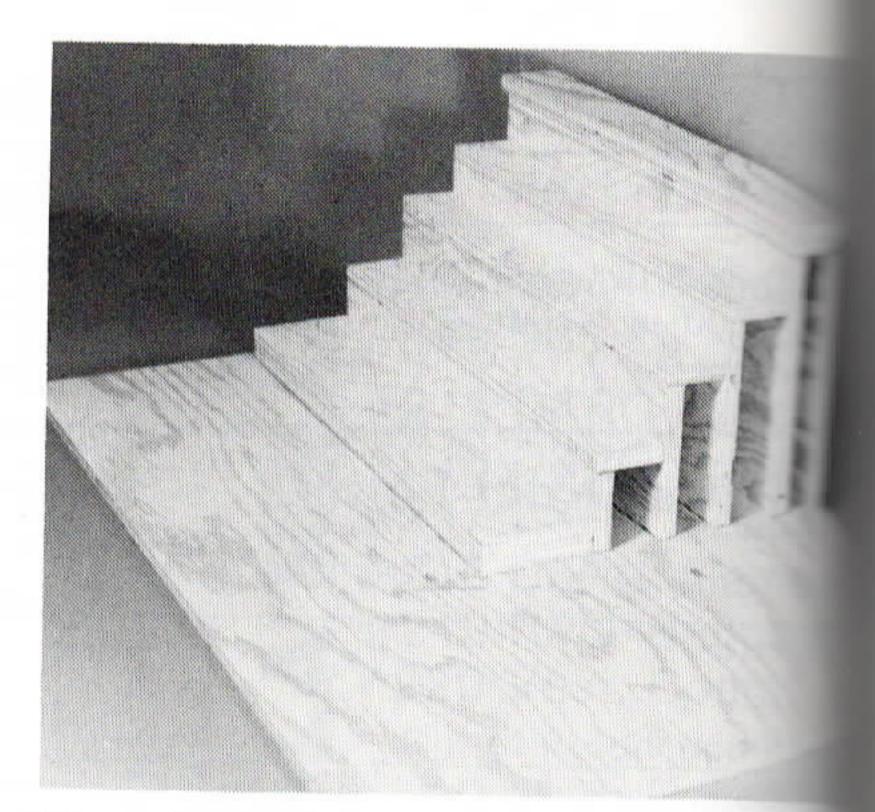
The mill has six work levels. The top floor is the upper work and dump area. Sorting tables are also located on level one. Level two has the raw ore bin and the grizzly and crusher described in the September/October issue are below it on level three. Level four contains the secondary ore bin with chute access platforms. Level five is for the stamps and supplemental amalgamation equipment and level six is where the concentrating or Wilfley tables, drying pans and sacking areas are located.

Once I knew where all of the machinery was going to be, I built my base. You can use my dimensions as shown in the figures

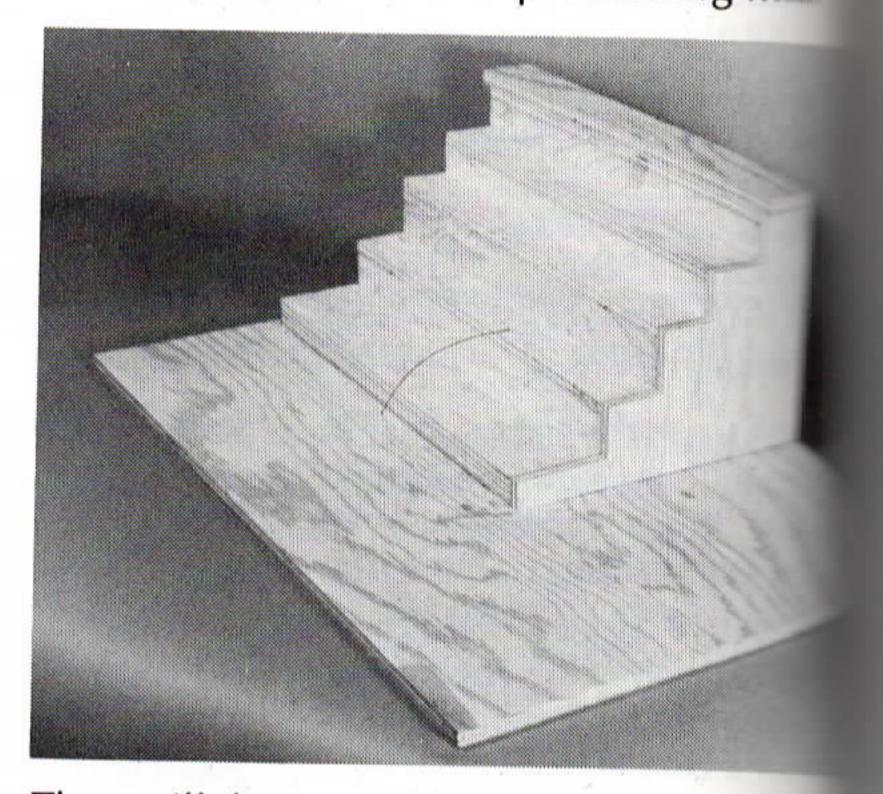
if you are going to build your mill as you follow this series. The dimensions on my drawing are for HO scale. Doubling these dimensions should work for O scale because I have allowed plenty of work area on the various levels. When you are cutting your plywood, remember to subtract ½ inch for the floor and side pieces as shown in the figures by dotted lines. Cut all of the same size pieces with the same setting of the saw so the parts will be exactly the same size. Once all of the pieces are cut, assemble them as shown. Note that all of the vertical supports extend all the way down to the base board, much like trestle bents and that level five is just two pieces of plywood, one on top of the other. If you are concerned about the baseboard warping, a framework of 1 x 2 inch wood will add strength. My mill will be installed on a larger diorama base which will provide added strength. If you are modeling in O scale and are using the C.H.B. Models machinery, check to make sure the equipment fits. I cut the two side boards after the vertical supports were in place. This allowed me to cut the side boards to match the stepped shape of the vertical supports. The side boards are glued in place.

Once my base was complete, I covered the vertical surfaces with Holgate & Reynolds HO-122 stone material. The floors were covered with .040 styrene. Both coverings were glued in place with epoxy. Then I painted the walls and floors. Most floors in prototype mills were made out of concrete with an asphalt overlay. The asphalt floor prevented any loose ore grains from falling between the cracks in the concrete and being lost forever. I painted my floors a dirty black and the walls a stone color. I will weather and streak my walls while the equipment is being added to make sure that the location of the weathering corresponds to the equipment locations.

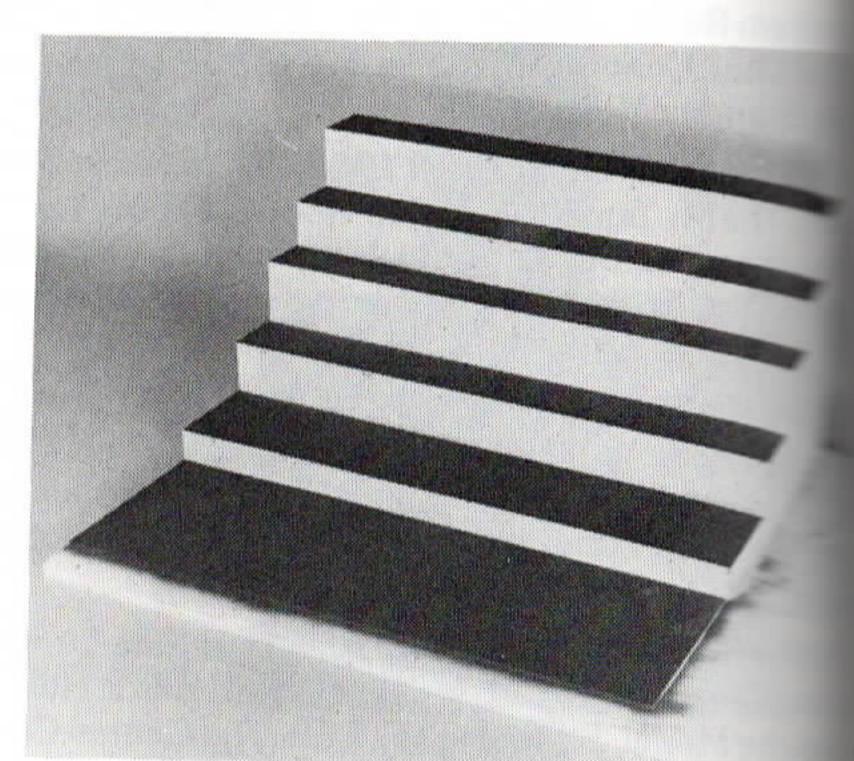
Next time I will (as I promised in July) finally describe the bins and chutes.



The plywood base and vertical supauthor's HO scale Ore processing miles



The mill base with the plywood empiece in place.



The completed mill base waiting for machinery.

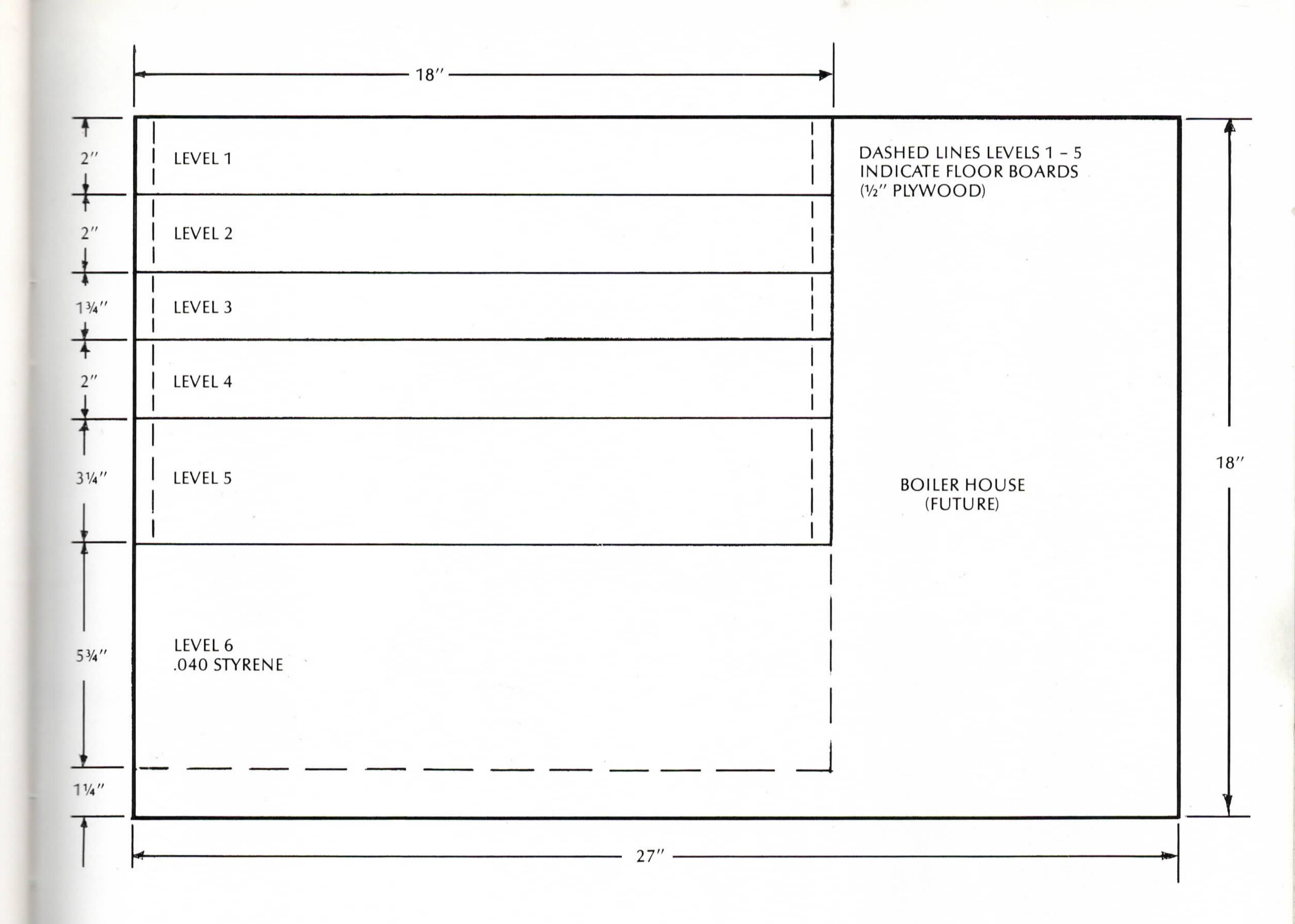


FIGURE 1. MILL FLOOR PLAN

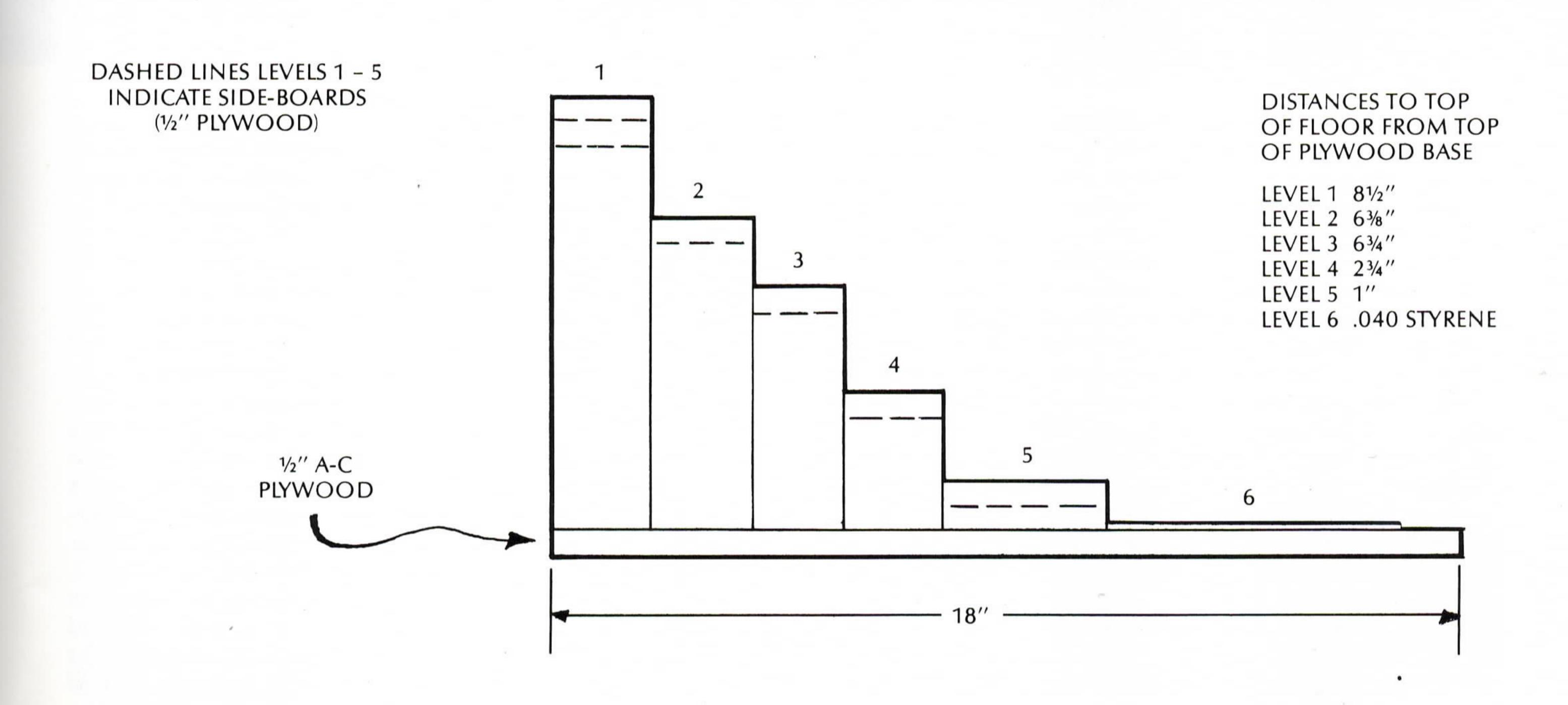


FIGURE 2. MILL ELEVATION



This has been a milepost year for the Colorado Railroad Museum. This past summer, the museum celebrated its 25th birthday by making the largest single purchase in its history: the Shank collection. In the September/October 1982 GAZETTE, I told the story of the Shank's acquistion of this collection of rolling stock and related hardware, which was then known as the Durango Railroad Museum. During July of 1984, Rio Grande Motorways moved the 15 truckloads of railway equipment north and east across the Colorado Rockies to the Denver area to join the already impressive roster of equipment at the Colorado Railroad Museum's home in Golden Colorado.

The Colorado Railroad Museum got its start back in the fall of 1948 when Robert W. Richardson and a partner moved from Ohio to Alamosa, Colorado, and established the Narrow Gauge Motel there. The partners began collecting everything they could

on Colorado railroading, with particular emphasis on the narrow gauge heritage of the region. Soon Richardson began to publish a mimeographed newsletter called the NARROW GAUGE NEWS (later known as the IRON HORSE NEWS). Shortly thereafter, Richardson purchased ex-D&RGW consolidation #346 from the Montezuma Lumber Company and the process of rescue and restoration was underway. It was not long before the Narrow Gauge Motel had track, a threeway stub switch and a growing collection of 3-foot gauge equipment. A replica depot was built to house small artifacts, photos, and the growing collection of paper memorabilia.

The Rocky Mountain Railroad Club in Lakewood, Colorado contracted with the Narrow Gauge Motel for the storage of RGS 10-wheeler #20 and it was moved onto the trackage in Alamosa. RGS consolidation #42 also made the move to the

motel. Later it was sold to Magic Monnear Denver, and then to Charles Brazilla. Jr. who moved it to Durango for his Durand Silverton Narrow Gauge Railross

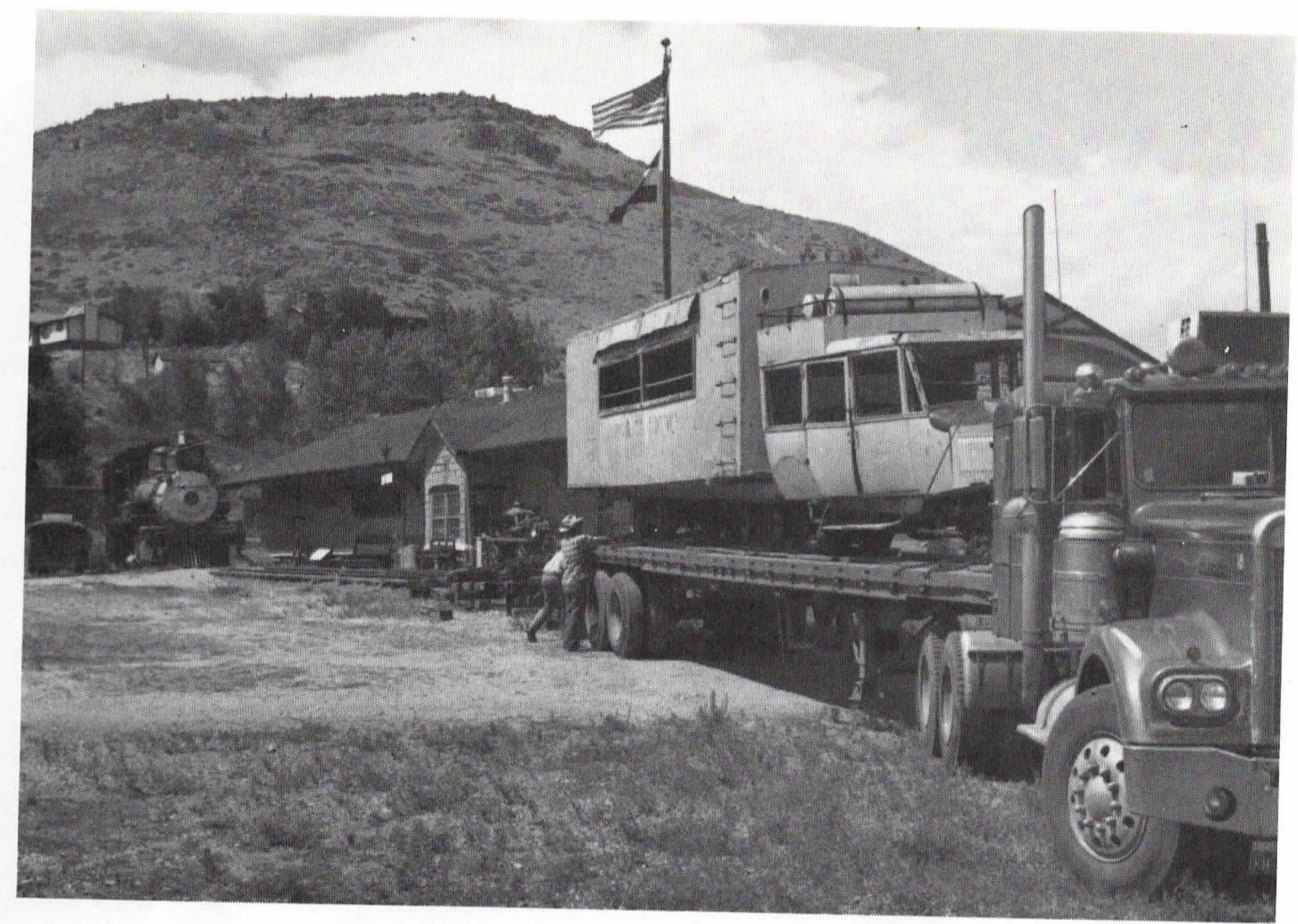
In the ten years following the Richardson's fledgling collection Narrow Gauge Motel, most of the gauge lines in Colorado were abanda and there was wholesale scrapping equipment Bob Richardson waged as minded and nearly single-handed paign to save rolling stock and from the scrappers. He was up again attitude of Colorado citizens of that general disinterest in preserving the cal history of narrow gauge in Colon And, among those who were interest there was inertia, and conflicts of between various local groups. All provided many frustrating moment Bob, but he was able to bring records and additional equipment mosa. D&RGW narrow gauge comme

tion #318 was an important addition during this period. Cornelius Hauck, another Ohioan, helped in the acquisition of this engine which had originally been built for the Florence & Cripple Creek and had made the "last runs" on the Pagosa Springs and Ouray branches of the Rio Grande.

Ten years down the line, more space and additional backing were needed; it was time to make a major move. In 1958, Cornelius Hauck joined with Bob Richardson in the decision to create the Colorado Railroad Museum. They checked out several locations, including two in the Salida-Poncha Springs area, as well as sites in the vicinity of Como and Fairplay. Finally a 15 acre site east-northeast of Golden was chosen. There was less land than the partners wished; however, they felt that Golden's proximity to the major metropolitan area of Denver would bring the citizen participation that would keep the museum alive. Against the impressive backdrop of North Table Mountain, construction began on a depot-styled museum structure meant to resemble the masonry style of the 1880's. Ten years of accumulated railroadiana began the trip north. Interior displays were built, rails were spiked down, and rolling stock was moved onto the property. In July of 1959, the Colorado Railroad Museum opened its doors to the public.

After the museum opened, acquisitions speeded up. In late 1959, ex-Rio Grande narrow gauge business car "K," which had been re-designated "B-8," was discovered in a back yard in Grand Junction. It was soon on its way to the Museum and restoration. Other major gifts and acquistions began to arrive, including a number of standard gauge items. During 1962, the CRM purchased ex-D&RG 583, a Baldwin consolidation built in 1890, and an Alcobuilt 0-4-0 industrial saddle tanker, both standard gauge. The following year, the Burlington System donated a 317 ton class 0-5, 4-8-4 numbered 5629, to the Intermountain Chapter of the National Railway Historical Society, for exhibit at the museum. The NRHS also owns a Burlington business car and a Santa Fe observation car that are currently on display at the CRM. The museum also has the beautifully restored Colorado Midland observation car #111, along with an RPO from the Colorado and Southern. A standard gauge combine from the Great Western is now coupled to locomotive #583 in front of the "depot."

The Rocky Mountain Railroad Club owns six pieces of equipment stored on the museum grounds. In addition to RGS #20, there is the RGS business car, "Rico," D&RGW short caboose #0578, one interurban car, and two trolley cars. There is a standard gauge billboard reefer that was owned by Coors and a steam incline locomotive that was donated by the Manitou & Pike's Peak Railway. Across the road from the museum proper, but also on museum property, are a Union Pacific 0-6-0 that used to be a yard switcher in Denver, a C&S rotary snow plow and a CB&Q



Moving #7 Goose off its trailer at the Colorado Railroad Museum. Photo, courtesy of the Colorado Railroad Museum.



"Pee Wee," an 8-ton Plymouth Diesel, pulling caboose #0578 with a chain. Photo by Don Heath.

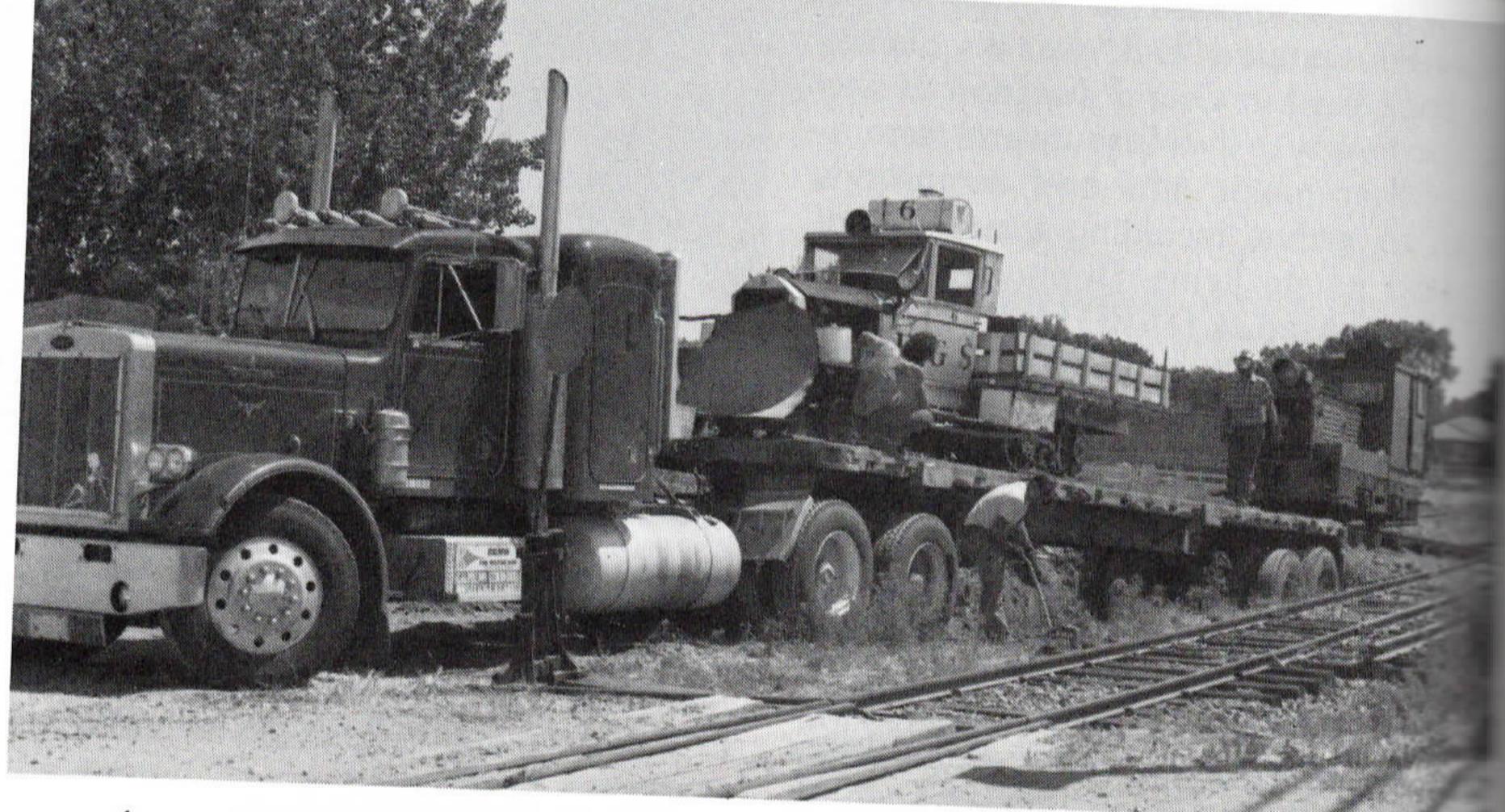


A pygmy moving a giant. Little "Pee Wee" shifting #50. Photo, courtesy of the Colorado Railroad Museum.



Volunteers check a new steel step on caboose #0524. Photo by Don Heath.

"Pee Wee" helps move Goose #6. Photo, courtesy of the Colorado Railroad Museum.



caboose. Back inside the fence, there are several additional "cabeese." Near a large wooden standard gauge Colorado & Southern unit sits a tiny C&S 4-wheel shack that used to roll the old narrow gauge line past the present site of the museum up Clear Creek to the mines.

And there is more: RGS caboose #0404 is resident at the CRM. A classic not to be missed if you visit is D&RGW narrow gauge coach #284, which used to roam the Santa Fe and Silverton branches of the Rio Grande. Several other passenger cars are being restored, including D&RGW coach #256 and two narrow gauge Pullmans, one of which was operated on the Uintah Railway. There is also an assortment of narrow gauge freight and maintenance-of-way equipment "cluttering up the yard." There are boxcars and stock cars from

several roads and there are refrigerator cars, gondolas and flatcars from the D&RGW. Rio Grande flanger OC is also part of the collection.

And now, in 1984, the Colorado Railroad Museum has acquired, in its entirety, the Durango Railroad Museum. This collection of rolling stock and related paraphernalia was assembled over the past 13 years by Bob Shank, Jr. and his wife, Julie. Fifteen major items plus artifacts, ties and rail were moved up from Durango. Now, the Colorado Railroad Museum has half of the RGS galloping geese in existence with numbers 6 and 7 joining #2, which has been operating at the museum. "Work Goose" #6 is now operating, and plans are afoot to restore "Passenger Goose" #7 to operating condition as well. Goose #7 had its express body modified for passenger

service in the final days of the RGS addition, Diesel switcher #50, at one the Rio Grande's Durango yard engine get a transmission re-build and "Peewee," the 8-ton Plymouth gas lomotive in shuffling rolling stock at museum.

Other new arrivals in the Shank collision include D&RGW RPO #60 and retored D&RGW short caboose #0524. The boxcars, a stock car, a drop-bottom good dola, a short reefer, and caboose bow #0548 are being re-painted for presention. Water car #493 is a unique item in collection. It was rebuilt many years from a C-16 tender. Included in the acquision are also three pieces that were used structures at Vance Junction on the RGS very old flat-roofed RPO, a coach, and standard gauge boxcar.

Bob Richardson, with arms crossed on the left, talks to volunteers during a break in unloading the Shank collection at the Colorado Railroad Museum. Photo by Don Heath.



Volunteers at the Colorado Railroad Museum switching rolling stock. Photo by Don Heath.



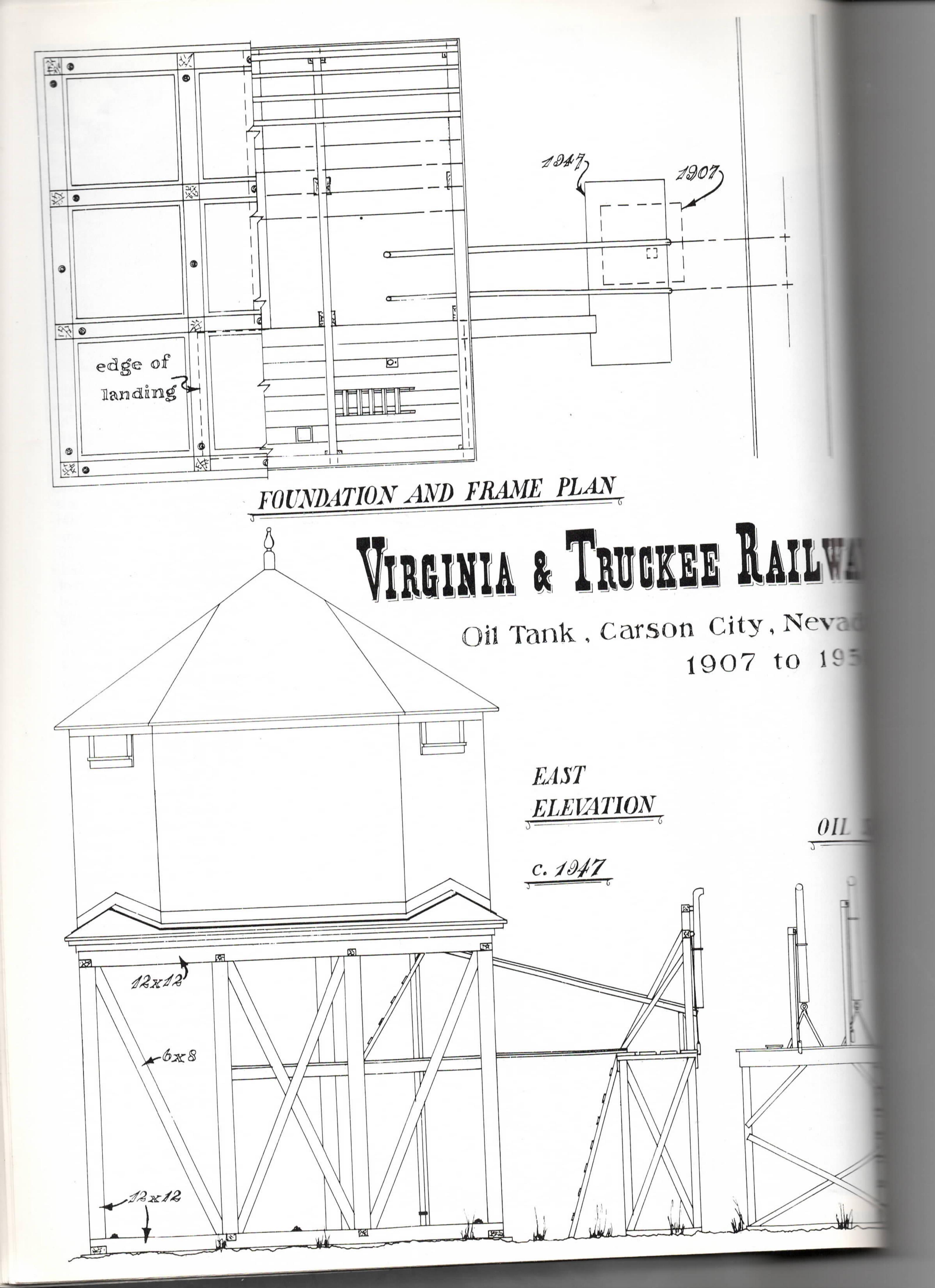


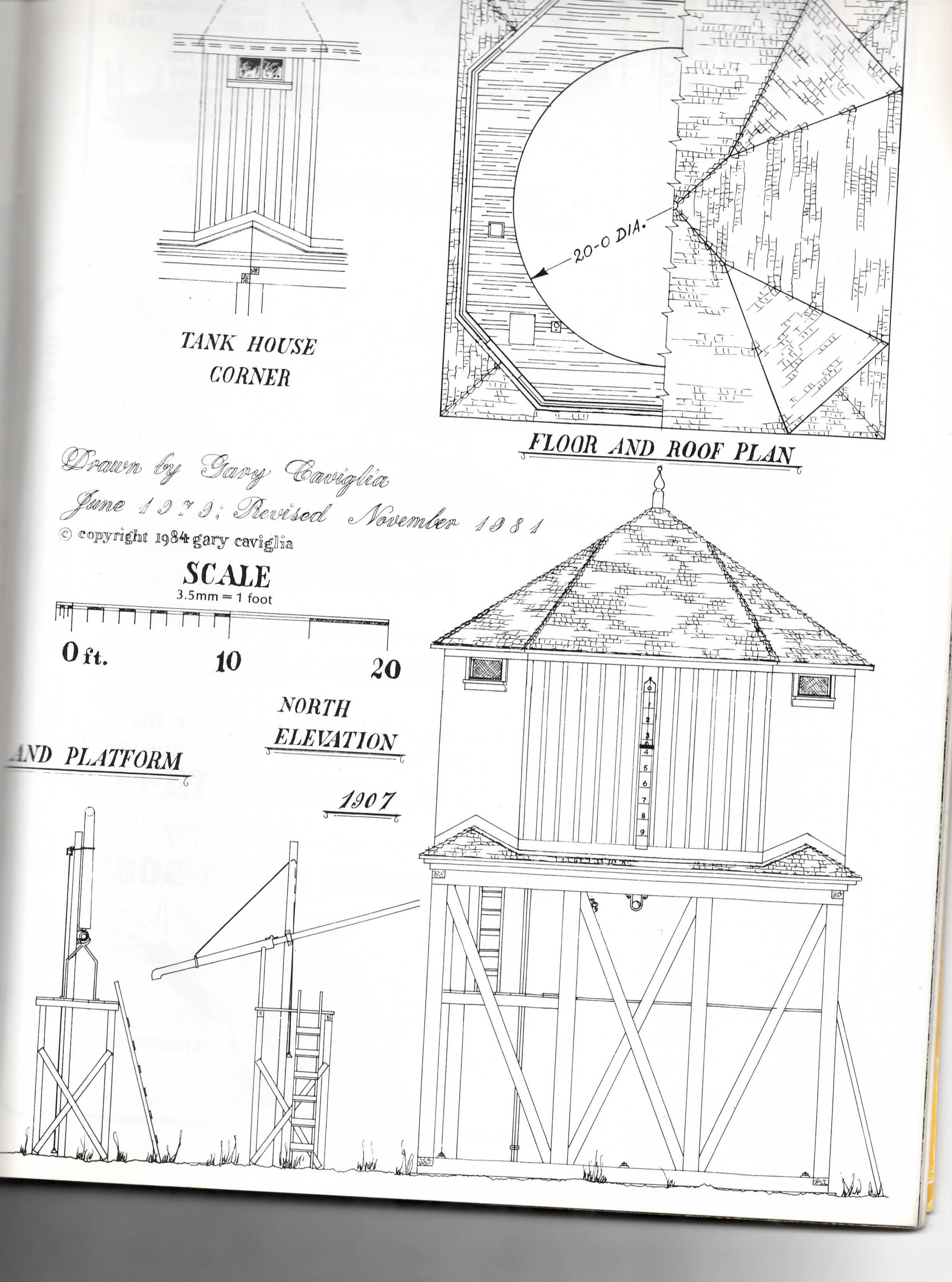


All of this "new" equipment has brought into focus the growing need at the museum for additional volunteer involvement. The staff and the small group of long-term dedicated volunteers have an important job to do, and they could use some help. All of this equipment needs to be protected, some of it needs to be restored, and there is a new display "yard" to be built. The CRM now has 40 pieces of narrow gauge equipment on wheels plus an additional 20 standard gauge items. Support is needed, both physical and financial. While most of the restoration is being handled by local talent, some volunteers are now coming from out of state, and spending their vacation time working at the museum. Dirk Ramsey, head volunteer with 22 years of experience, states that you don't need to have specific knowledge of railroading in order to make a valuable contribution to the cause.

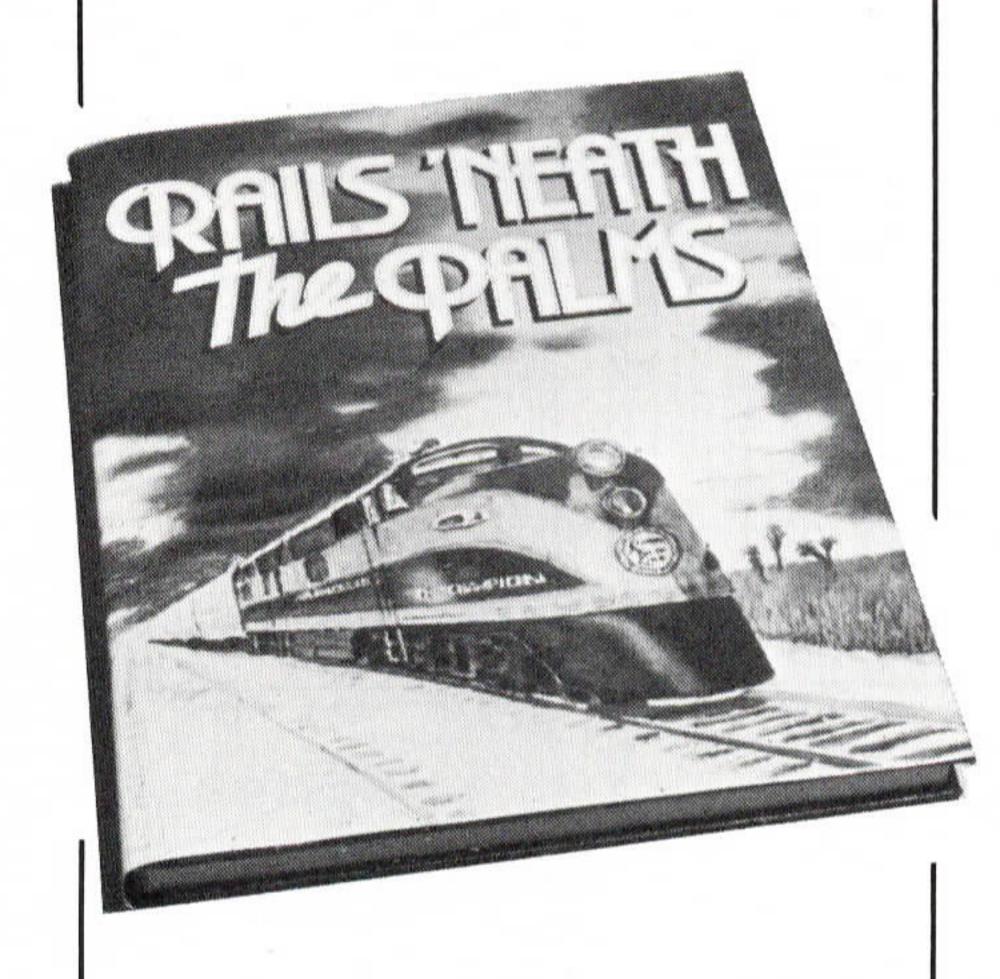
Financial support for the Colorado Railroad Museum is routed through the Colorado Railroad Historical Foundation. The foundation is a non-profit, (tax-deductible) educational institution governed by a board of trustees. The specific purpose of the foundation is to further the preservation of western railroad history through operation of the Colorado Railroad Museum. The museum is administered by an executive director, a position ably filled by Bob Richardson, and is also home of the Denver HO Club which has an extensive operating layout in the basement of the "depot."

The Colorado Railroad Museum's primary source of income is from publishing the Colorado Rail Annuals and other books, but support also comes in the form of membership dues. There are three classes of membership: active at \$10.00 per year, contributing at \$25.00 per year, and sustaining at \$100.00 or more per year. Many have already joined the team, but more are needed. Hands-on involvement in restoration and operation or just joining the foundation are ways you can help out. The address is: Colorado Railroad Historical Foundation, Inc., P.O. Box 10, Golden, CO 80402.





NOWAVAILABLE



legend of Florida's myriad short lines. In a state built largely by the passenger train the real story wells up, piecemeal, from dozens of small operations—some dating back to the Civil War. Follows their evolution from the Civil War to the mid-twentieth century when they eventually melded into a few major rail systems. Packed with maps, illustrations, and rare photos. *Hardcover*, 8½ x 11 trim size.

0-933506-08-2

\$29.95

PLUS THESE REPRINTS

RAILROADS OF NEVADA & E. CALIFORNIA (Vol II) David F. Myrick.

It is as much a history of the area as a railroad book—from Death Valley & the Mojave Desert to the hard rock tunnels of Goldfield and other communities. Includes an index to both volumes, rosters of motive power, road and town maps. Hardcover, 492 pages. 573 illustrations. 8½ x 11 trim size.

0-3810-7039-0

\$39.95

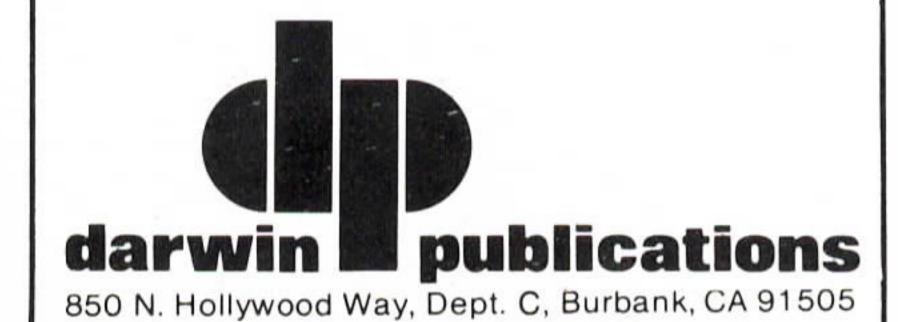
SNOWPLOW: CLEARING MOUNTAIN RAILS Gerald Best

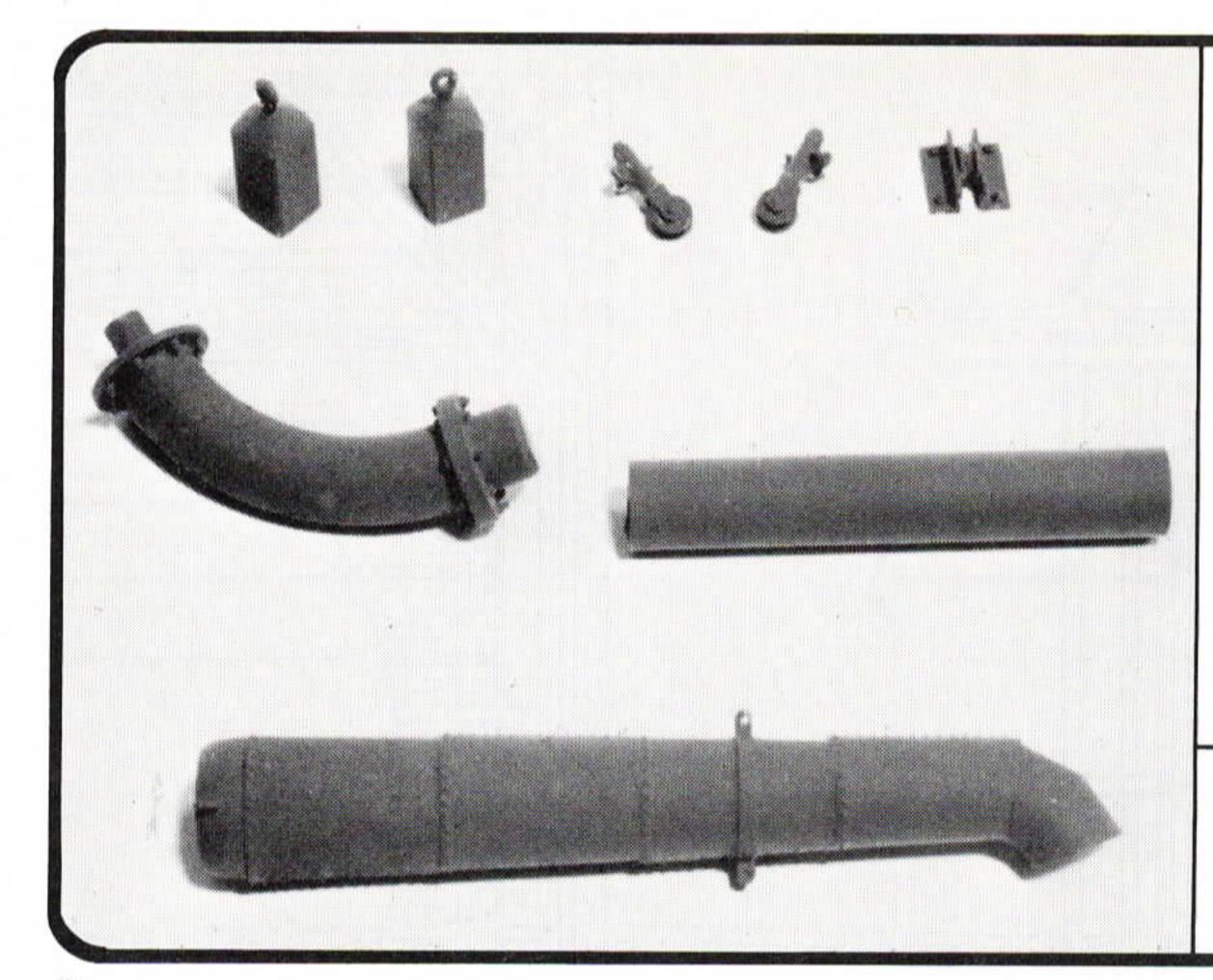
The intriguing subject of snow-clearing equipment and methods gets the complete and deluxe treatment. Includes maps and roster. Hardcover, 125 pages. 150 illustrations. 8½ x 11 trim size.

0-8310-7060-9

\$19.95

Write for Free Twenty-four Page Catalog





New in "O" Scale

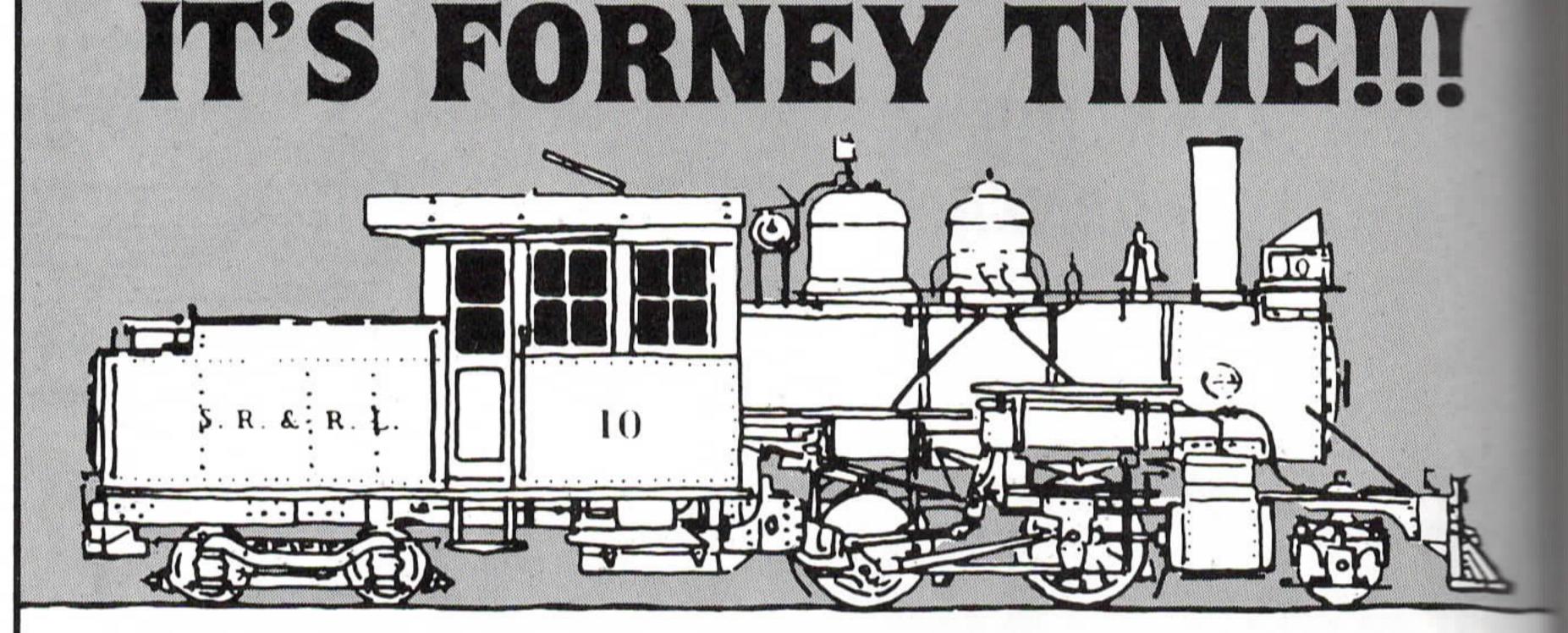
D&RGW

Water Tank Hardware TK-200.....\$14

- Spout (3 Pcs.)
- Delivery pipe
- Delivery ell
- Counter weights
- Counterweight Shear
- Valve Rope Sheave
- Plans

C.H.B. Models
P.O. Box 93
Lakehurst, NJ 08733

What TIME is it???



Do you want to pay RETAIL???? (\$230) NOOOOOO!!!

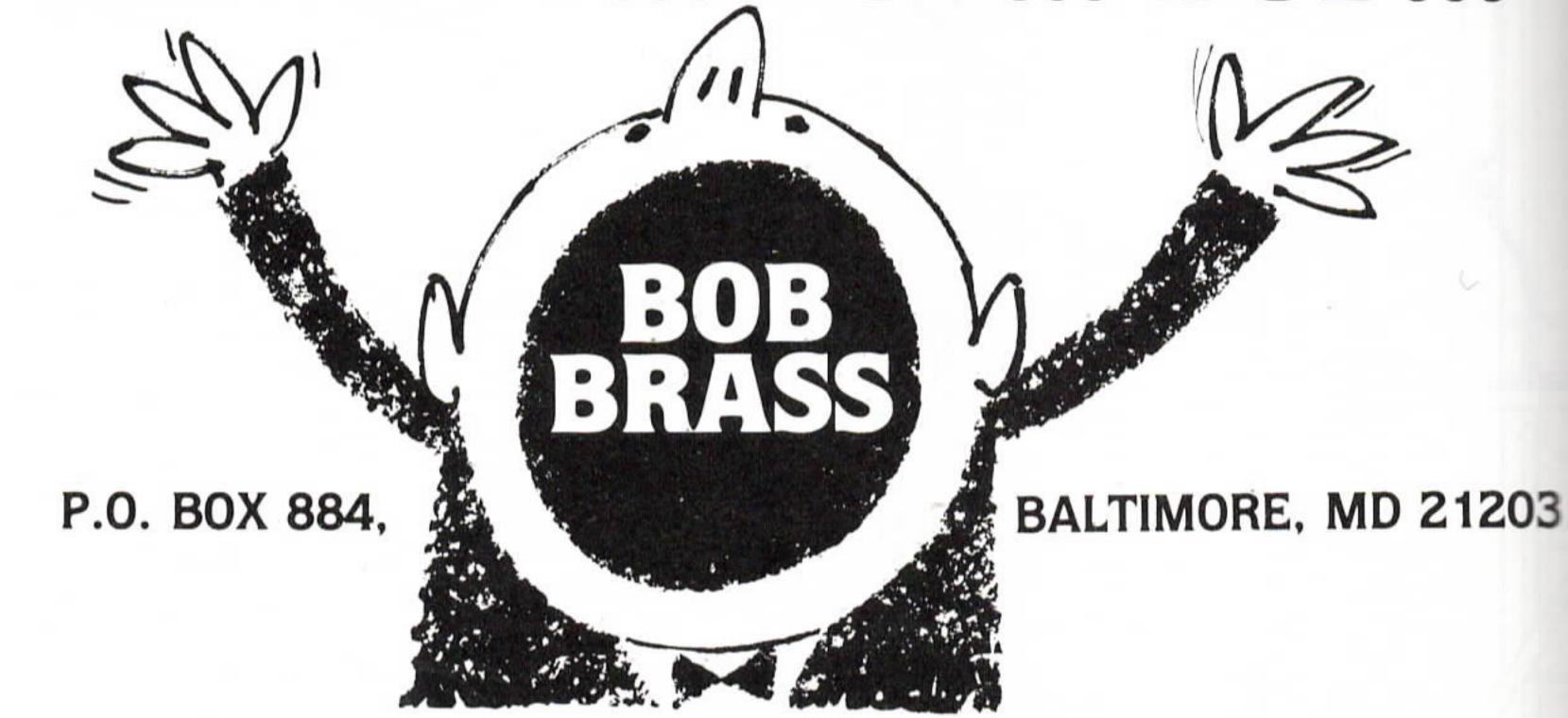
Do you want a GREAT PRICE???
YEEEAAH!!!

How about \$186, postpaid for the HOn2½ SR&RL #10 2-4-4T ready-to-run???

ALL RIIIIIIGHT!!

Who can sell it like that???

BOBIII BOBIII BOBIII BOBIII



S SCALE COUPLER CAR

\$24.95



- SPECIAL WHITE METAL CASTINGS
- * SPRUNG TRUCKS
- * KAPPLER SCALE WOOD
- * THIN FILM DECALS
- DESIGNED FOR KADEE COUPLERS

Available thru your dealer or direct

Rio Grande Models Ltd

Box 4463

Santa Clara, CA 95054

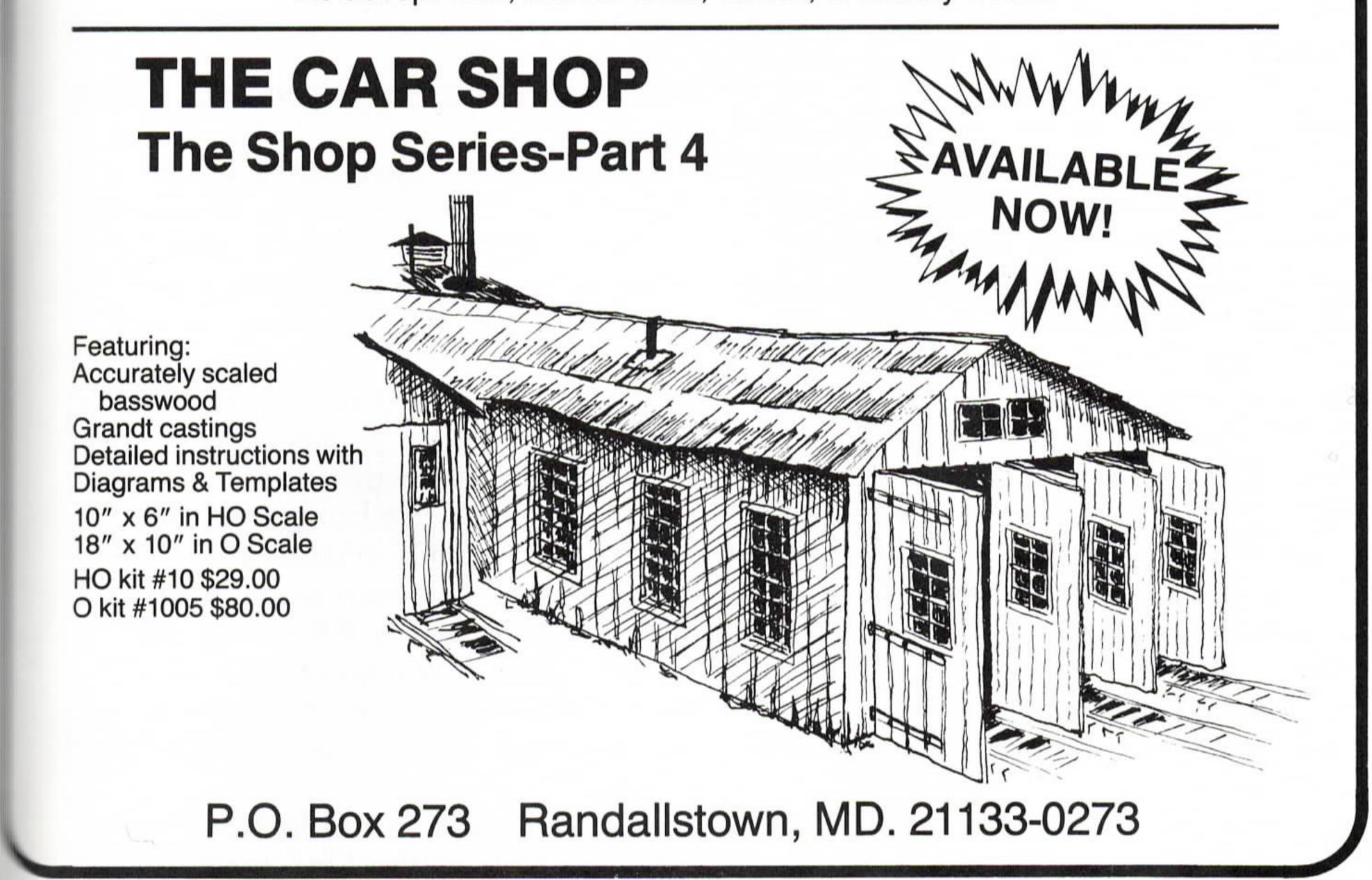
Model by Dave Fontana



kits so get your order in right now! HOn3 kit only \$17.95. Extra trucks \$5.00 a pair. Please include \$3.00 shipping. Maryland residents add 5% sales tax.

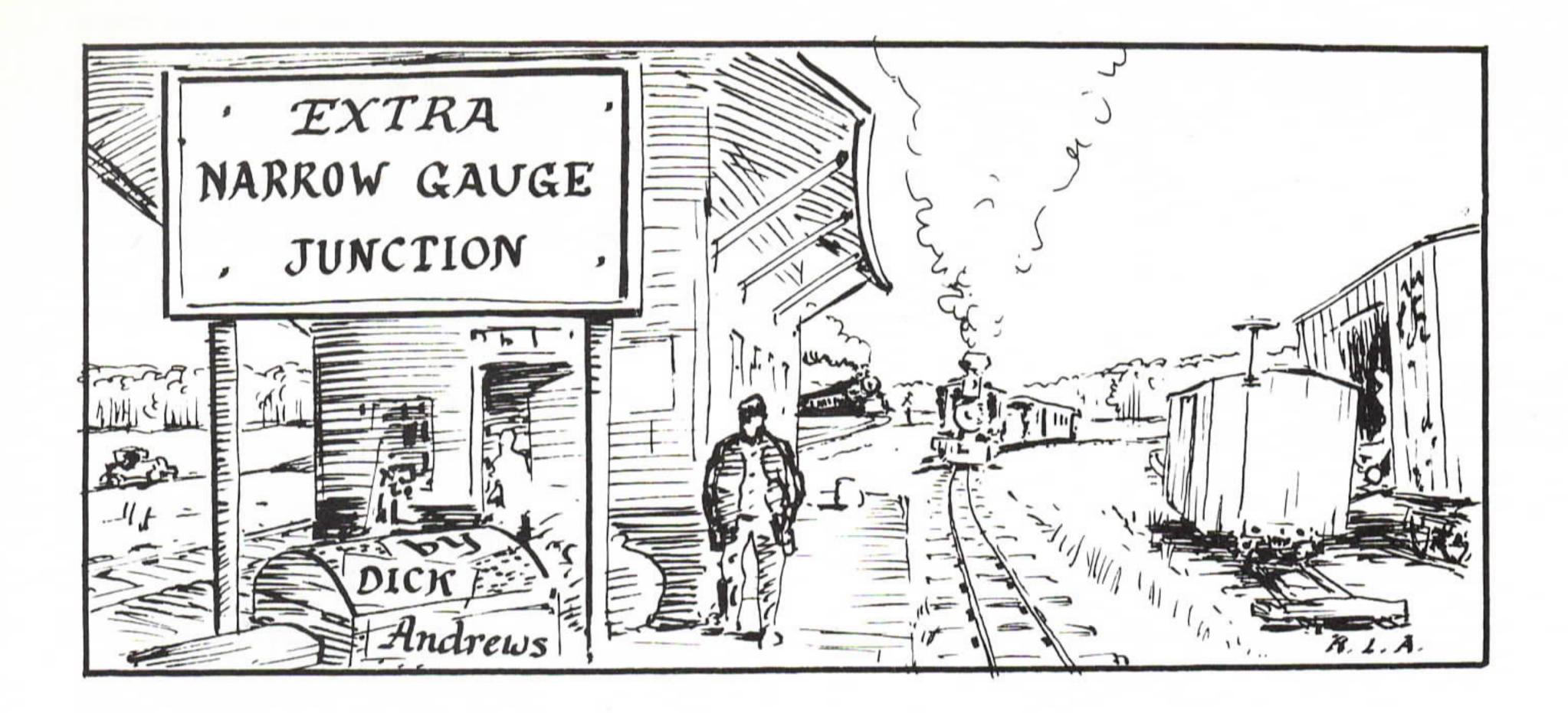
Hopper car loads available soon—watch our ads!

These 3 bay hoppers are in limited supply so order today! We accept Visa, Master Card, Check, or Money Order.



. ADVENTURING ON PUGET SOL TORY . SCAYLEA ON PEOLIT GRAPH ST TOWNS . HEROES OF THE WE: GET SOUND . ADVENTURING ON WAUKEE ROAD EAST DIANS AS WESTERNERS · CANAL STIONAL · TIMBER . COACH, TRAIN RECKS . DISASTE darwin **M** publications 850 N. Hollywood Way, Dept. D, Burbank, CA 91505 XICO GHOST TOWNS . CALIFORN:

RTHWES Write for our NEWNTURING LESKI . LEFrée Catalog THE NORT VERED WAGONS . PACIFIC SQUAR SWASIOGGING - LOGGING THE R



by Dick Andrews

New England is dotted with old, white wooden churches supported in part by an institution known as the "church supper." Every two weeks or so during the summer season, ladies of the congregation cook and bake, and by five o'clock, the serving table in the vestry is loaded with a variety of dishes. Local people and campers alike line up at the door and the hearty repast gets under way. For one evening a city fellow matches his capacity against country plenty. Strong young ladies refill coffee cups and there is always another piece of cake or pie. The city custom of dieting is forgotten for one jolly hour.

This year the Rev. Russell Ingalls of the North Bridgton and Harrison Congregational churches had a delightful idea for a "different" church supper. Noting that many in his congregation recalled from time to time the "narrow gauge" line that used to run along the edge of Long Lake in both villages, he enlarged one church supper, to be held at North Bridgton church, by making it a memorial celebration of the old 2-foot gauge Bridgton & Harrison Railway. That the track had been gone for over 50 years was no problem; many remembered the little trains well. Others too young to remember the line had surprising knowledge of the little road. Rev. Ingalls invited all known 2-foot gauge fans; the invitations went out by mail, phone calls and even local radio spots. Tables would be loaded with memorabilia of all kinds. Movies and slides would be shown and talks given. Very shortly it was clear that the response would be considerable. And so it was – from two to nine, we had a pleasant afternoon, we enjoyed a fine supper, and festivities went on into the evening. Attendance was good, and the many ad libs from the audience during the final slide lecture showed widespread knowledge of the 2-foot and helped identify many items.

Bill McLin was there. Bill was a young fan of the line 50 years ago who had the foresight to note that many photos and old timetables and other items might easily be lost, and so remarked to Lester Ames,

president of the B&H Ry. who appointed him Official Historian of the road on the spot. Bill wrote a short but very complete history of the road with rosters, map and photos which was published initially in the Bridgton News. The title, rather long for a small gauge short line's story, is The Twenty-Four Inch Gauge Railroad at Bridgton, Maine, and, happy to say, the fine account is still available from Bill himself, (William McLin, "Homeport," South Harpswell, Maine 04079), for \$3.70. At the same price is another delight from Bill, The Dummy, which tells the story of the old "dummy" line that once ran along Old Orchard Beach from Saco, Maine. It was broad-gauged but had very light little cars and tiny 0-4-0T locomotives.

Bob Dingley, a local historian, was unable to attend; but thanks to Bob, the railroad segment of the Bridgton Historical Society's collection is substantial. He also helped Bill on his history as did Ed Mead, who was present. Ed is a notable 2-foot fan and narrow gauge aficianado generally. As a precocious train rider he rode the South Park and Clear Creek lines in Colorado back in the 1930's. Even before that, he had visited the Sandy River line and when that pike was abandoned he bought railcar #4 and loaned it to the B&H. In more recent years Ed has written a number of delightful books on country railroads of which one, Busted and Still Running, a fine history of the B&H, is now being revised for re-publication. Ed also has a new book out called Narrow Gauge to the Hills which describes his various world-wide travels to ride narrow gauge railroads. It is available for \$15.95 plus postage from Weedy Rail Books, Etna, NH 03750 (see May/June 1984 **GAZETTE** for review).

Ed mentioned that in a few years Bob Outland will be offering an enormously complete and fully illustrated book on the Bridgton line.

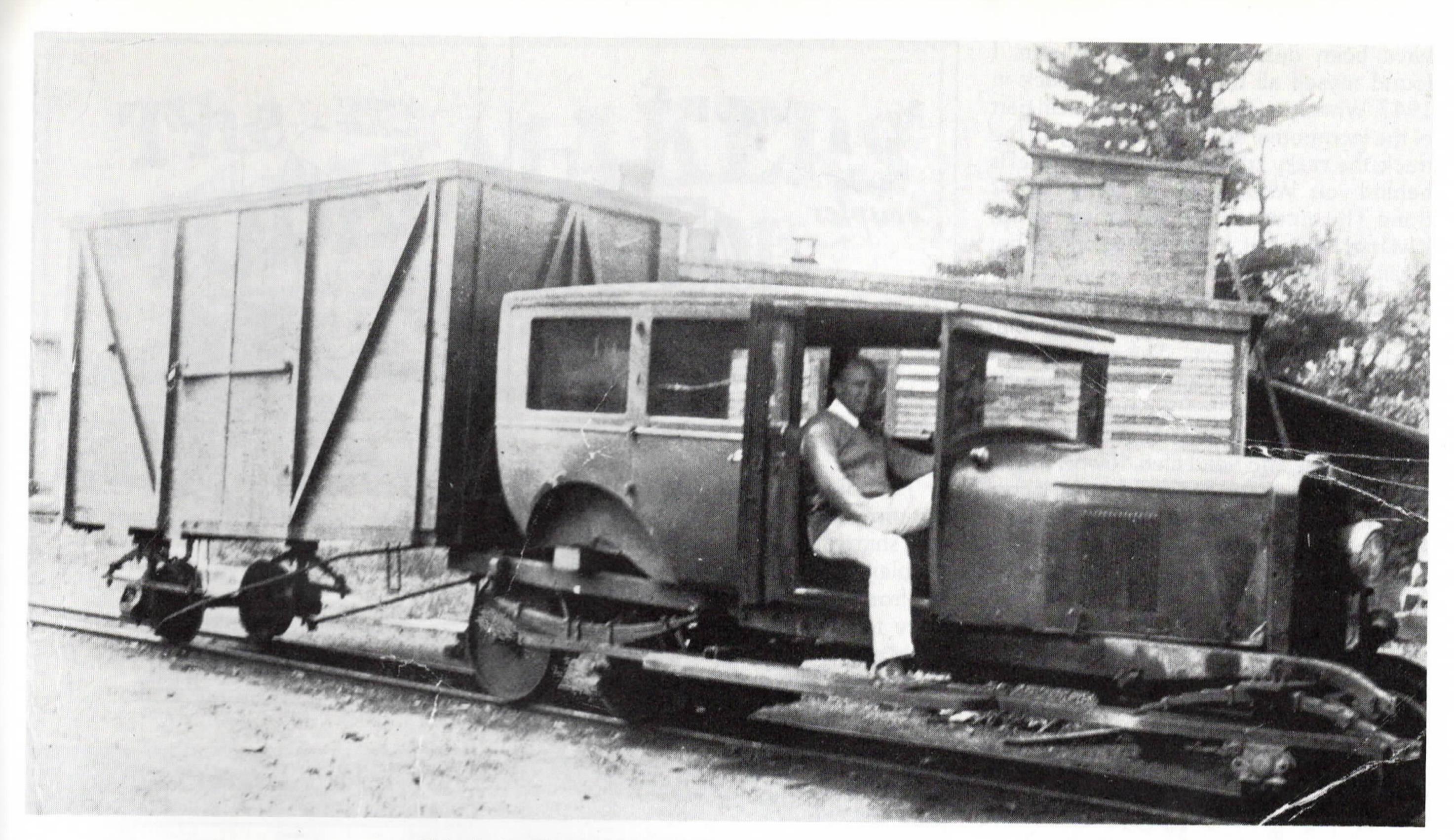
There seems to be an affinity between the ministry and the rail fan movement. Rev. Ron Albury of Plainfield, New Jersey, who has a camp in Harrison, was present at the dinner with a considerable souvenir of the B&H. Although the line had been some 25 years when he first visted Ron quickly became interested history and lore of the little road dividing the abandoned grade imm ments, finally walked all 20 miles Bridgton Junction. There he found remains of the line's Chevy rail carn first appeared in the early 1930's the cost of steam trains to the june regular mail, packages, and a few gers. The photo shows this rig. None the car body rested on a real chassing in those days. They were high, name handsome in a square sort of war wheel arrangement of the rig was two dash two dash zero. There is a tion 2-foot wheelset under each end would make them about 18 indiameter. The drive seems to be larger wheelset at the rear of the care There is still another smaller wheels far end of the "Talgo" trailer which built, avoided straining the Chev on the long three percent pull up junction. The car was photographed side of the Bridgton engine house. see the engine house smoke ducts the rig. Rev. Albury's souvenir of the door which he brought to the dinner 44 inches high and 30 inches wide heavy.

When Ed Mead's ex-Sandy Rubus #4 arrived at Bridgton, the Charto the track gang and towed a limit wheel car, while a Ford Model T presumed by the section gang was purposture.

Many thanks to the Rev. Ingallal ladies of his two congregations who possible the mini-narrow gauge countries summer in North Bridgton.

I had my little On2 Sandy Rivershow, and frankly bent reality a indicated that it was B&SR #1 Those locomotives were also 0-4-4T's but had 4-foot driver when and the longer tanks given to Sand #1 and 2.

We now come to the first parasuperstructure of the On2 loco



This little Chevy rail car with "Talgo" style express trailer replaced steam for regular runs on the Bridgton & Harrison Ry. The arrival of ex-Sandy River railbus #4 bumped her to the section gang. This photo was taken in 1934 in front of the Bridgton engine house. Photo by John Murphy.

Rev. Ron Albury with his relic - a door from the Chevy railcar found at Bridgton Junction. A photo of the prototype rail car is taped to the door. *Photo by Dick Andrews*.



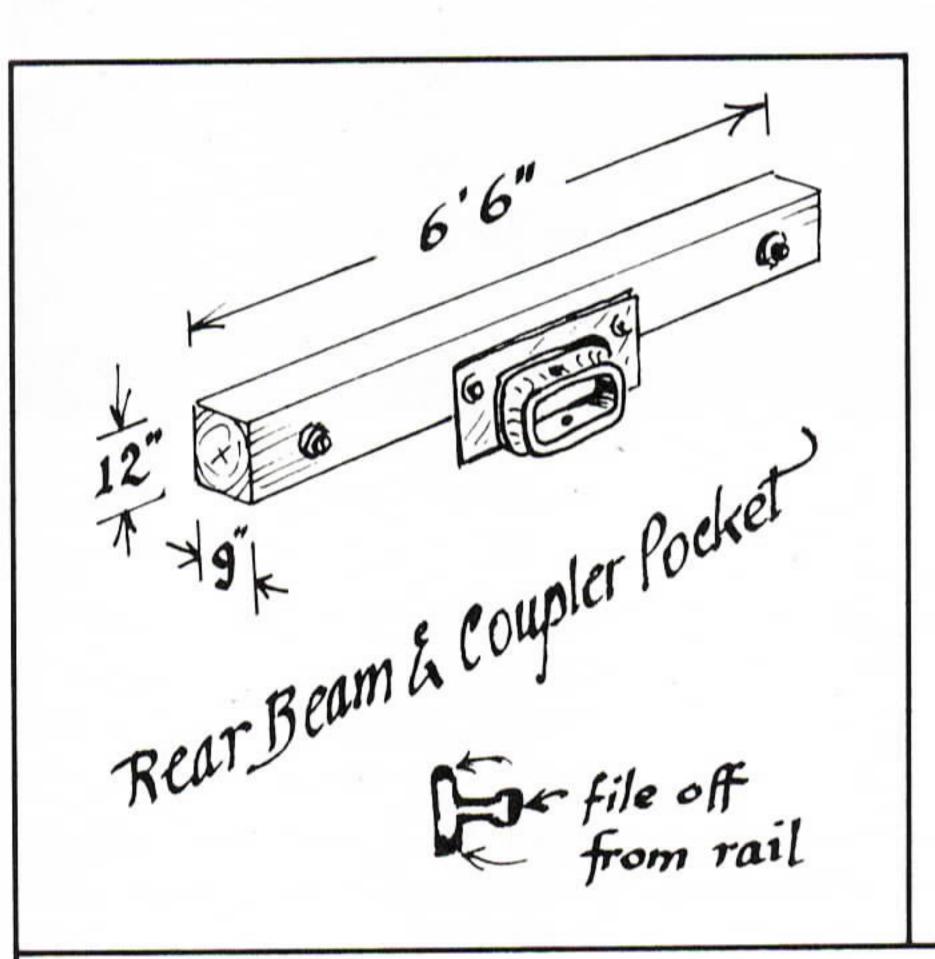
They don't make them like they used to. A rear view of the Chevy door reveals that it is a heavy piece of sheet metal with hardwood inserts. *Photo by Dick Andrews*.

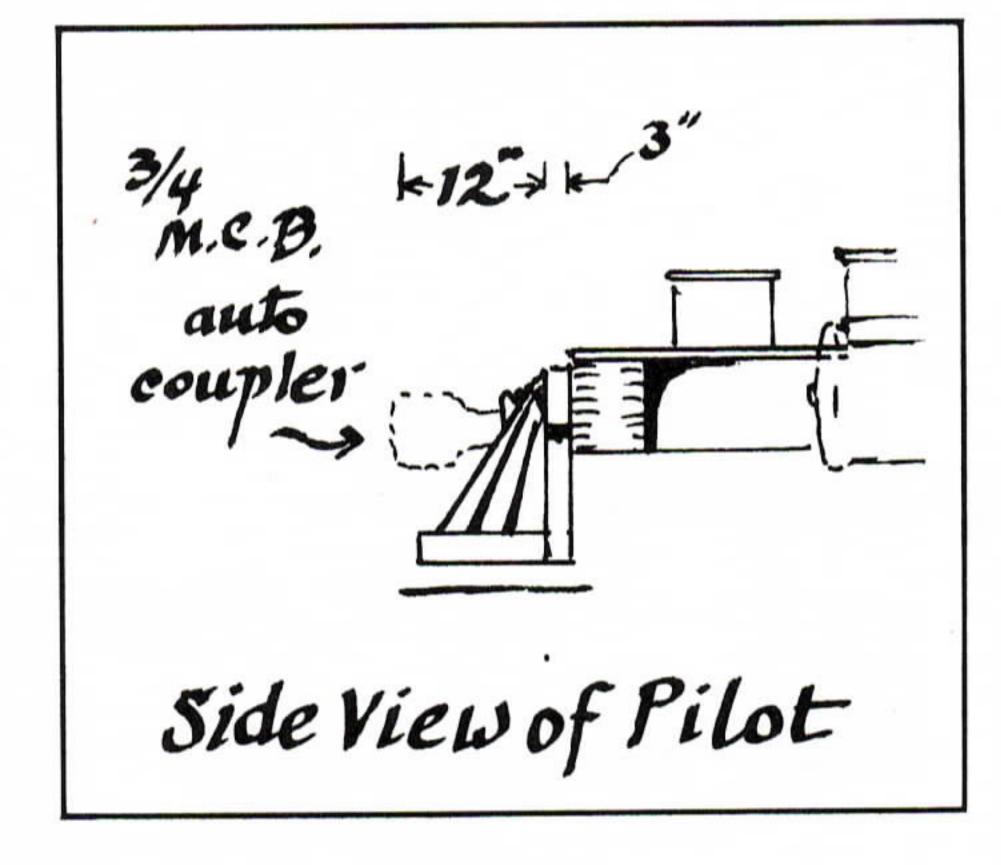


NOVEMBER/DECEMBER 1984

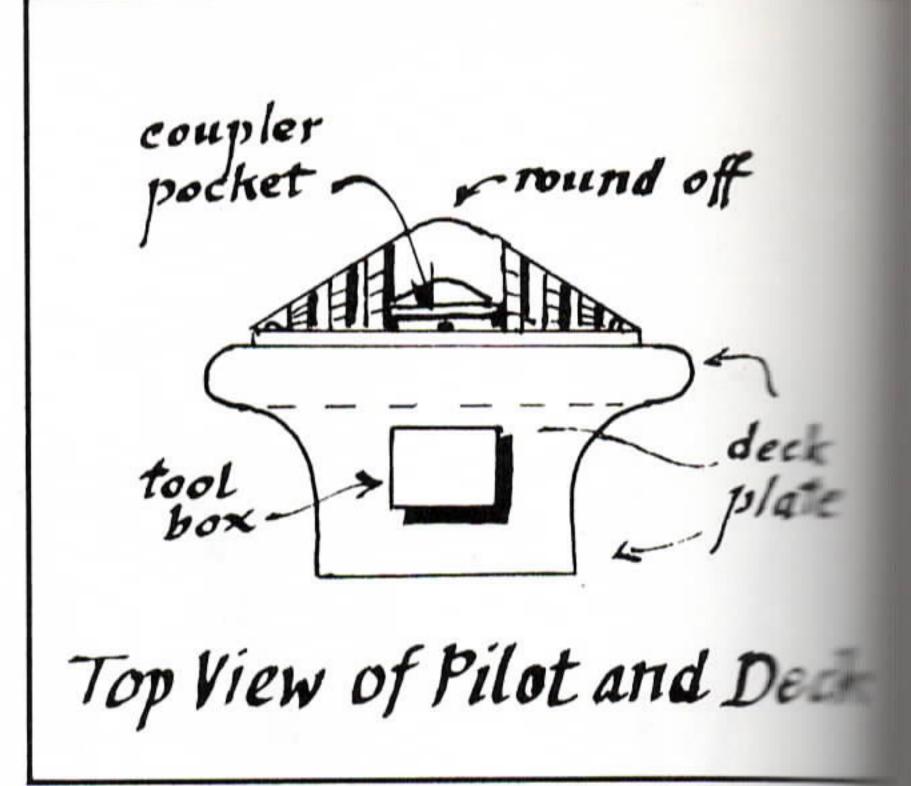
have been describing in my column. I found myself all thumbs on this back in 1947. When you have the mechanical part of the locomotive done and running on the track, the really critical part of the model is behind you. What has to be done right is done. The outside may not do anything but it will get looked at. It may not be critical but it will be criticized.

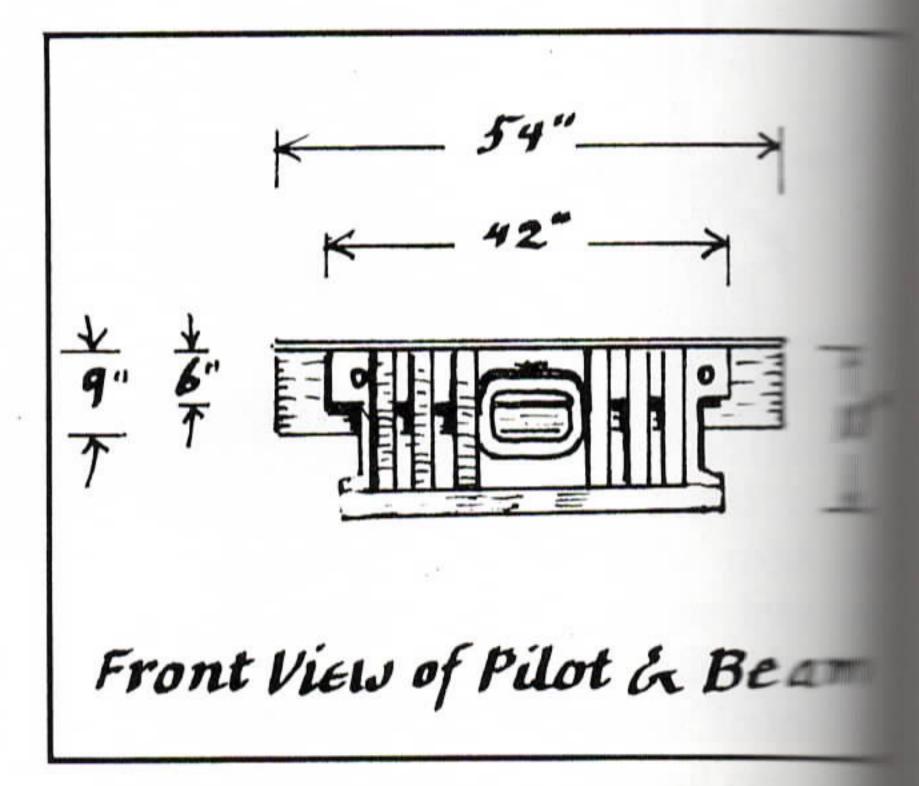
I used wood for my end beams. These are easily attached to the brass frame with working nuts and bolts. The rear coupler pocket was of the link and pin type but was able to take an automatic coupler. I made mine from a small piece of code .070 rail with the base and head filed down. Anneal the metal to a cherry red and then let it cool slowly. The metal should now bend easily. Solder on a backing plate and saw out the metal within the pocket as shown in the sketch.

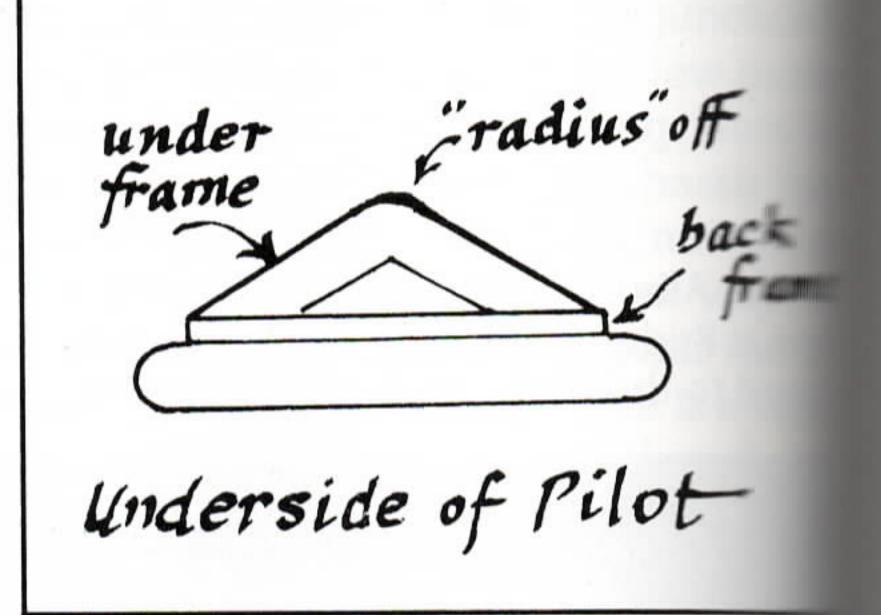


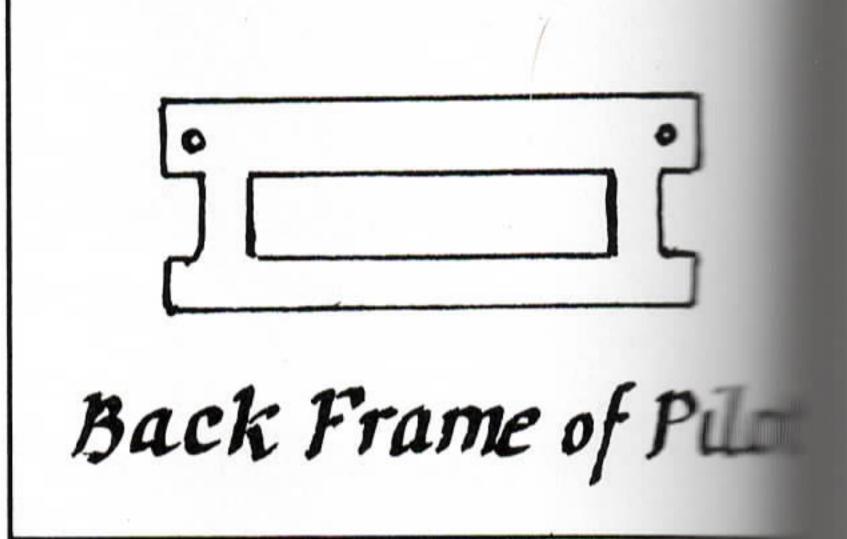


The pilot or cow catcher (or for a locomotive this small a calf catcher) was a long sharp affair in the days of link and pin couplers. A long drawbar was mounted on the front coupler and was swung up into place to couple to a car. On snow plow work with two or three locomotives so rigged, it was not uncommon for one of the middle engines to get lifted up on those drawbars like a pig on a spit and roll over. However, the automatic coupler does not lend itself to such long extended pilots so I used a stubbier type used on the 2-foot pikes after the Janney coupler became the American safety automatic. You can trace my procedure for making this pilot by following the sketches. I nearly went up to the wall until - just before going to sleep one night - it dawned on me how to do this.





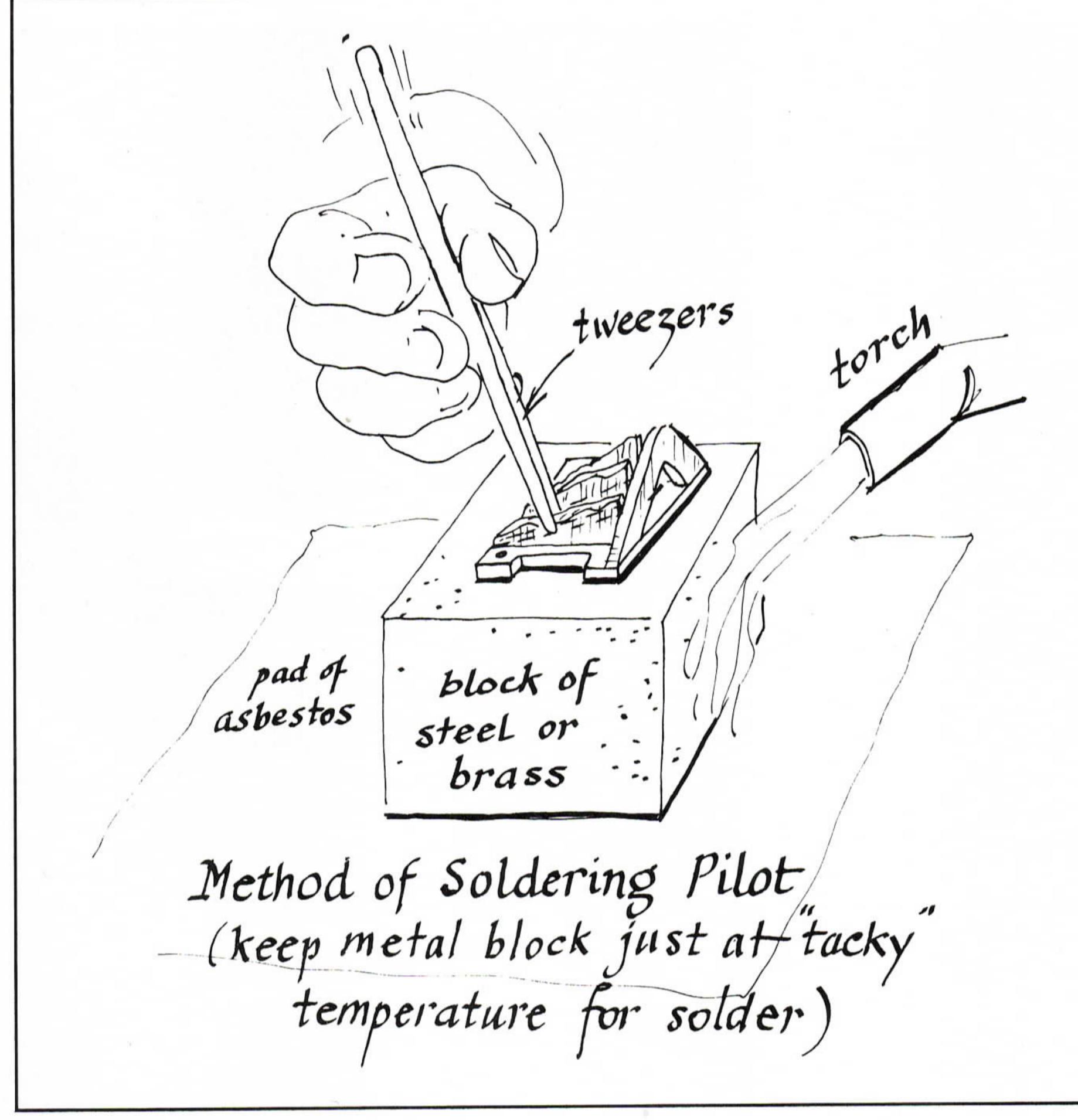


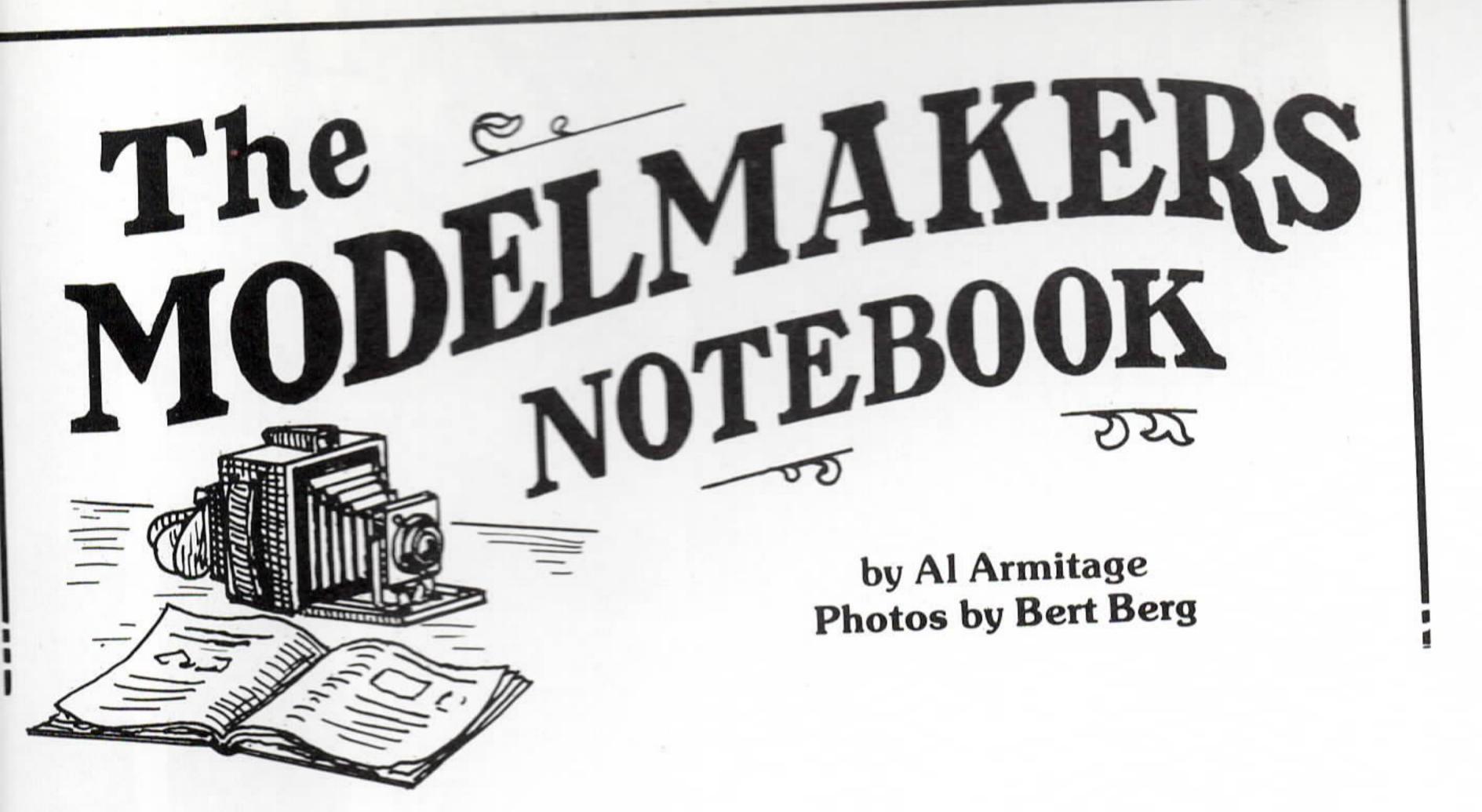


Small bits of metal being sold usually go from the fall apart state frozen state very fast. But to keep that just tacky enough state, put the its back on a nice hefty chunk of play the torch on the metal chunk solder reaches that tacky state. No sweat at all. Now file the shape.

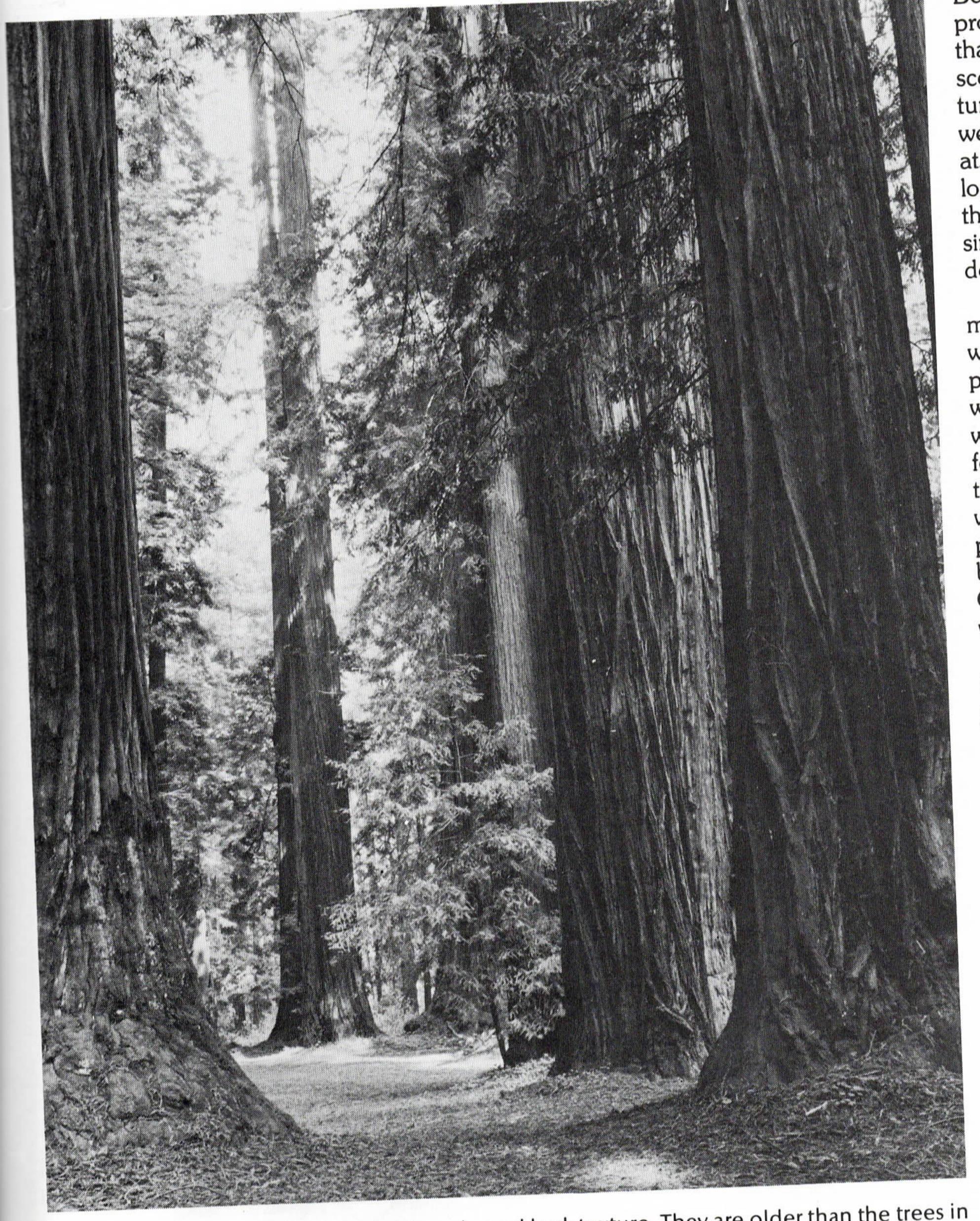
Next time I will complete the superstructure.







Logging Scenery



These large trees show the remarkable redwood bark texture. They are older than the trees in the other redwood forest photo. They are so much taller that the floor of the forest gets less sunlight than in the previous photo and therefore has less undergrowth.

In looking for photos I used in my last article on the skewed timber bridge (September/October 1984 GAZETTE), I came across these photos taken by my late friend Bert Berg, a dedicated logging fan and prolific photographer. It occurred to me that these photos show some unusual scenery that few modelers have the opportunity to see. Those of us who live in the western U. S. can find lots of forests to look at, but we seldom have the chance to see logged-off scenes such as those shown in these photos. Many parts of the world simply do not have stands of timber, so I decided to share these photos with you.

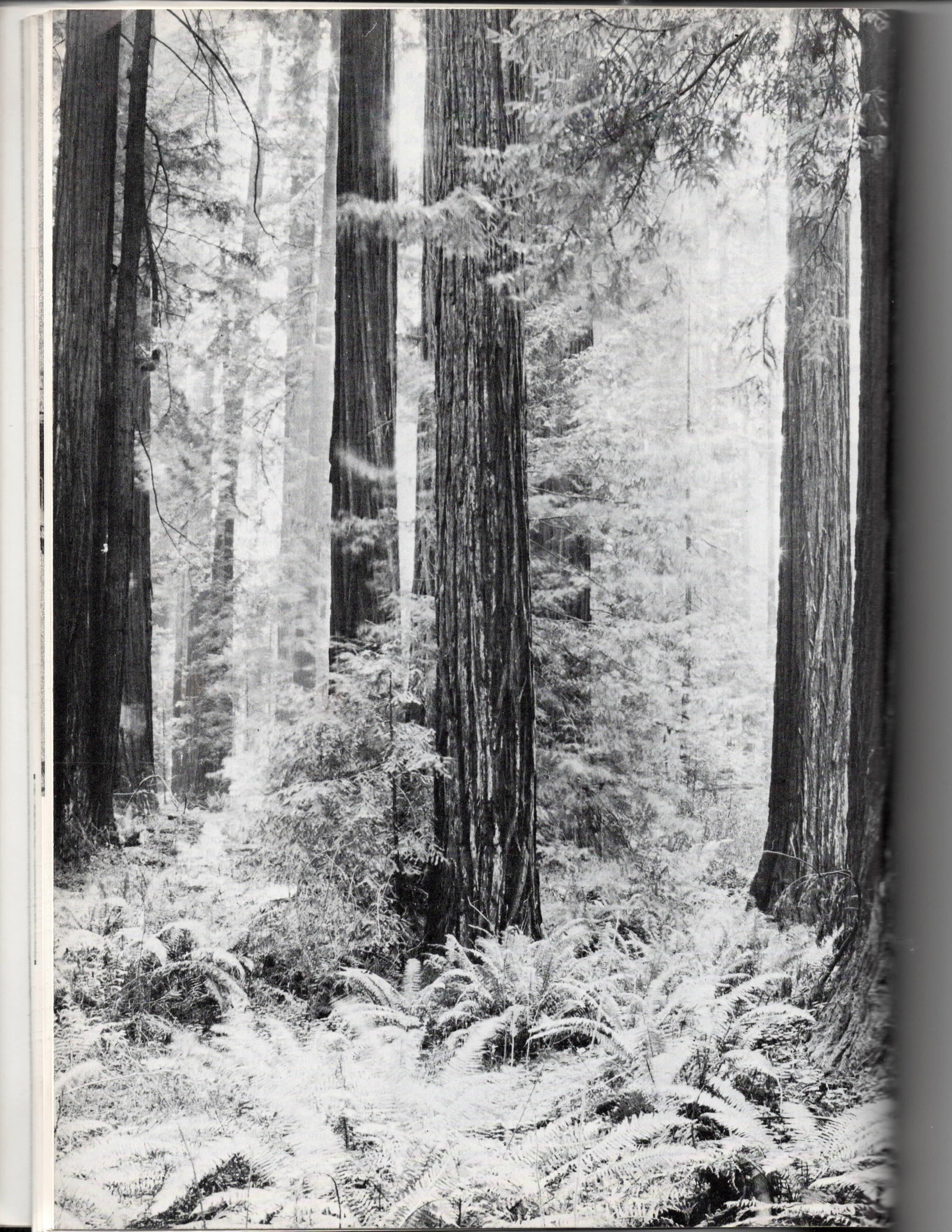
The big trees shown in the photos are mostly redwoods, while the cut-over areas were probably covered with spruce, fir, pine, and possibly cedar, as well as redwoods. I have no idea where the photos were taken, but I suspect the redwood forest photos were taken somewhere along the northern California coast near Eureka, where Bert lived. The other photos were probably shot in Washington or Oregon, but might have been taken in northern California also. As near as I can judge they were all shot about 18 years ago.

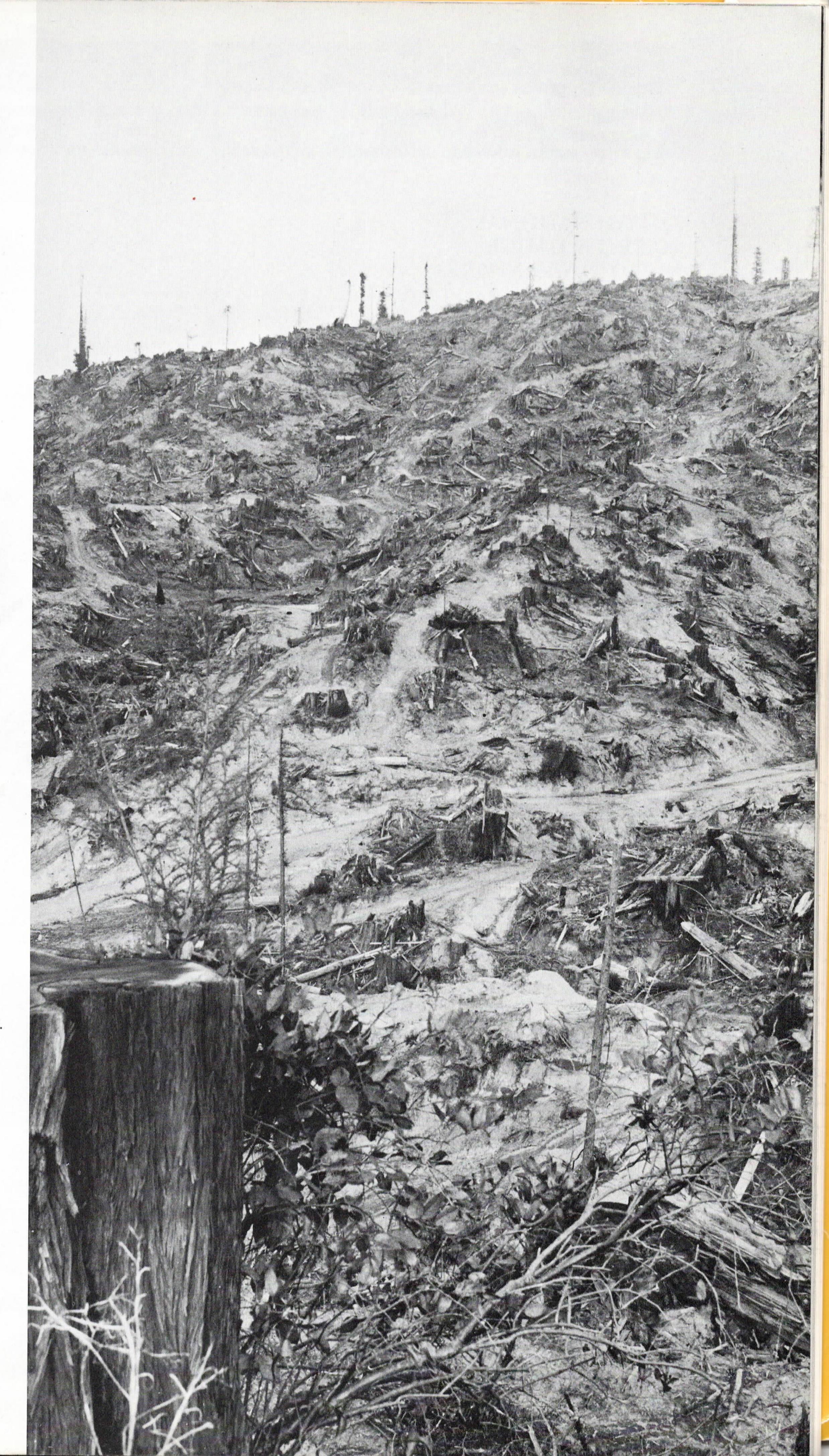
In the logged-off photos you can see that the loggers swept through a forest like a tornado, taking everything in sight and leaving the hills completely denuded of just about anything that grew. No "selective logging" here. This is the way it was done in the early days of logging before anyone worried about running out of trees. Now, fortunately, the big timber operators maintain reforestation programs to replenish the supply of trees.

Anyway, I thought these excellent photos might serve as an inspiration for those of you who would like to model part of a forest, and a cut over area, on your model logging railroad.

Both areas could be part of a painted backdrop or, even better, modeled in three dimensions if you have the space.

Another way would be to model the foreground and blend it into a painted continuation of the scene on the backdrop.





Left: These coast redwoods are about 20-24 inches in diameter. Note the abundance of fern. How would you model this interesting bit of detail?

Note the large amount of "slash" left all over the place in this clear cut area. A truck road runs through the middle of this scene and numerous "Cat" tracks thread their way up toward the summit.

AL --

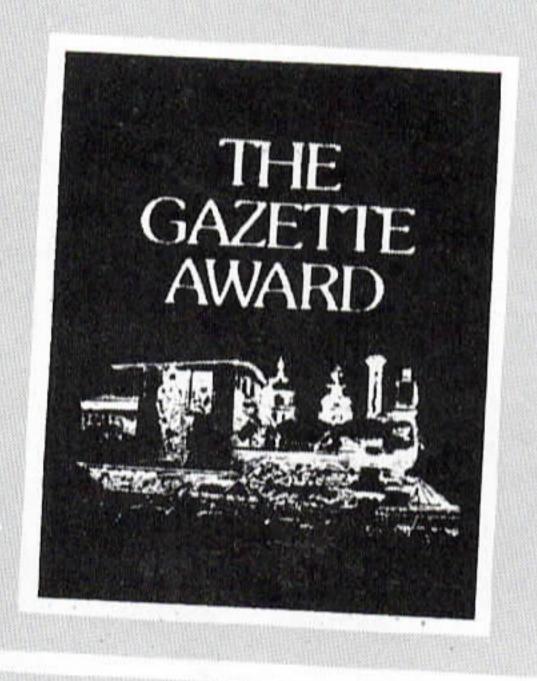
GALLE BEN

FOURTH NATIONAL NARROW GAUGE CONVENTION WINNERS

by Bob Brown Photos by Dwayne Easterling

The contest at the Fourth National Narrow Gauge Convention was the best I have ever seen at any convention. The winners were chosen by a popular vote of the people attending the convention. Tom Madden and his crew were up late Friday night counting the votes. Fortunately they had access to a computer which saved many hours. Tom also rode herd on the contest room to make sure the models were safe.

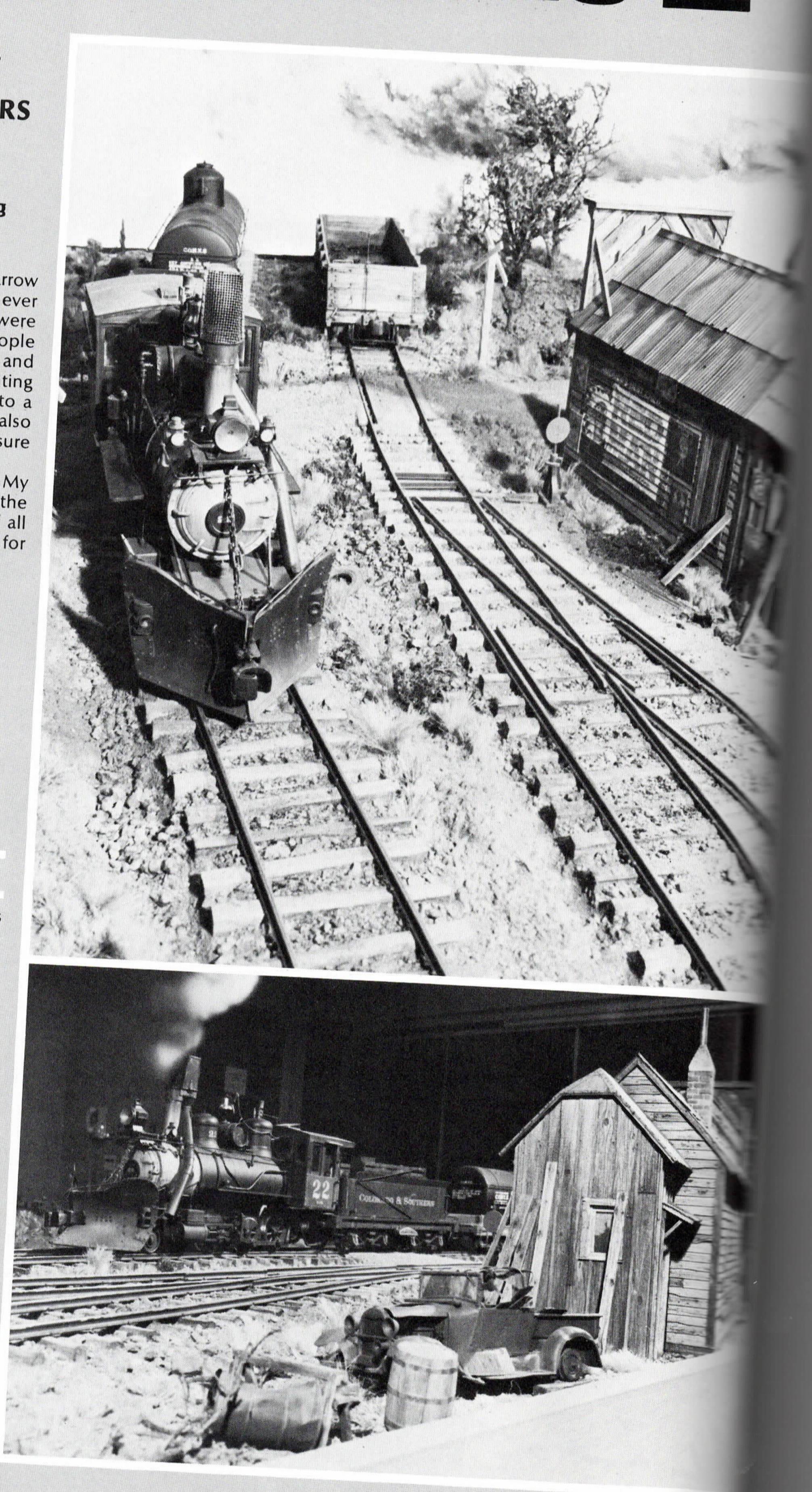
I have listed all the winners here. My thanks to Dwayne Easterling who took the photos. I would like to show photos of all these fine models but there is room only for photos of the first place winners.



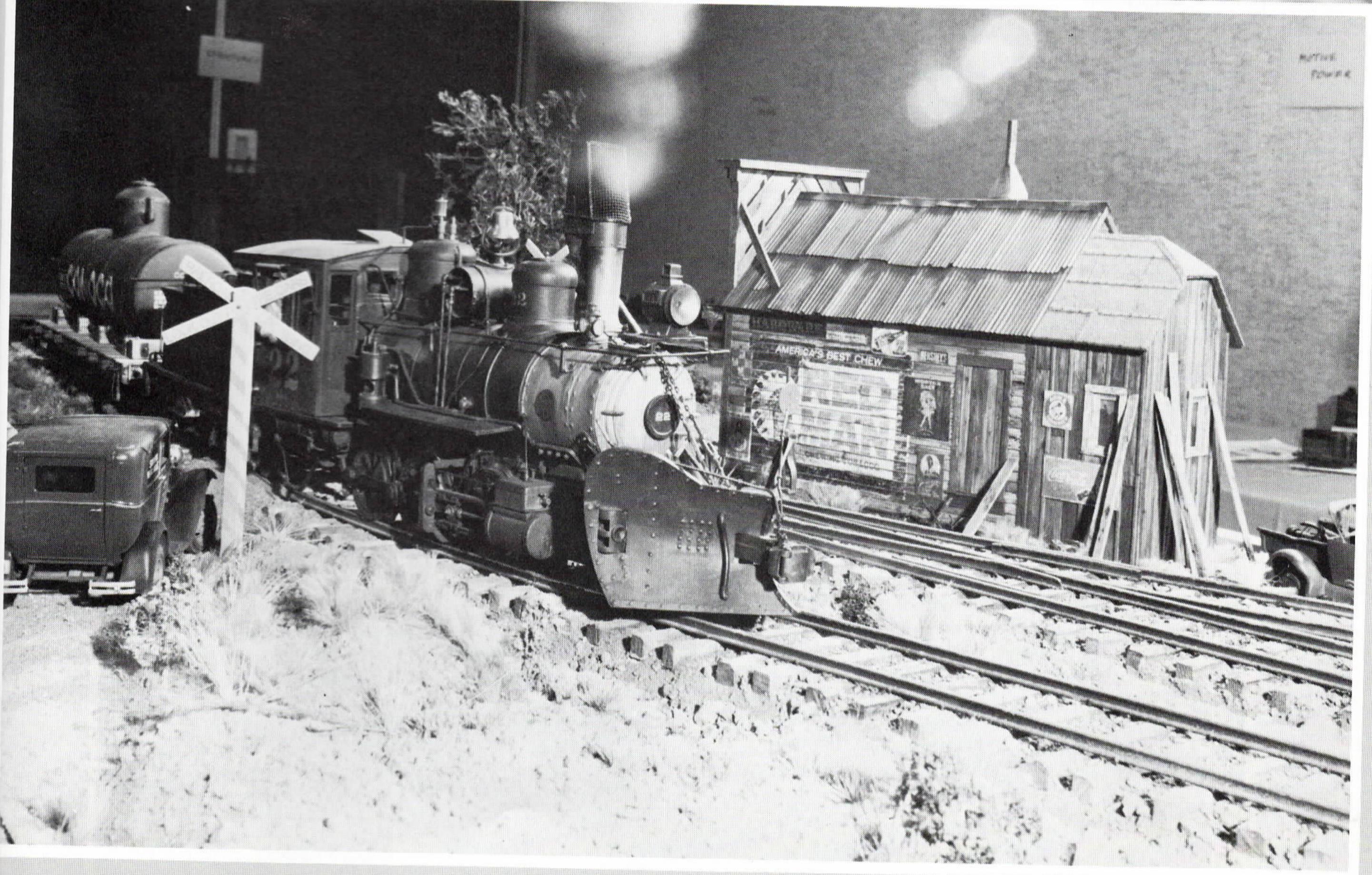
THE GAZETTE AWARD

The big winner was Joe Crea with his beautiful 1/2-inch scale, G Gauge diorama. Joe garnered Best In Show, The Gazette Award, and First Place in Dioramas. I was struck by the realism of Joe's models as I entered the contest room. The diorama is about 4 feet long and 2 feet wide. As you can see in the photos the scene has two tracks and one stub turnout. There is a CONOCO tank car and a high side gondola. Both of these cars use Don Winter trucks, wheels, and details. The scene also has a wonderful little store which would make Greenberg and Nash happy. The diorama is strewn with details and clutter including some old cars, weeds, and other junk. The locomotive is a model of Colorado and Southern #22 and is built over an LGB mechanism using as much styrene, plastic, card, and wood as possible. This locomotive model is breathtaking. Even the spectacles on the engineer have glass in them.

Joe has agreed to write up detailed articles on his models for us. His first article will be on the locomotive and will appear in the January/ February 1985 **GAZETTE**. That article will be followed by articles on the store and rolling stock. Congratulations, Joe.









MOTIVE POWER...

FIRST PLACE:
On3 D&RGW K-37 #492,
Francis Cosgrove.

SECOND PLACE (not shown):
On3 Hungry Horse Timber Shay #2,
Jim E. Barron.

THIRD PLACE (not shown):
On3 CB&Q 2-8-0 #537,
Mike Trent.

FREIGHT CARS ...

FIRST PLACE:
Sn3 D&RGW stock car #5999,
Jim Booth Jr.
(Jim won the **GAZETTE** Award at Valley Forge).
SECOND PLACE (not shown):
On3 SP Narrow Gauge A-frame Hopper car,
Dan C. Stuettgen.

THIRD PLACE (not shown):
On3 three high side and one drop bottom D&RGW gondolas, William Garlock.





PASSENGER CARS...

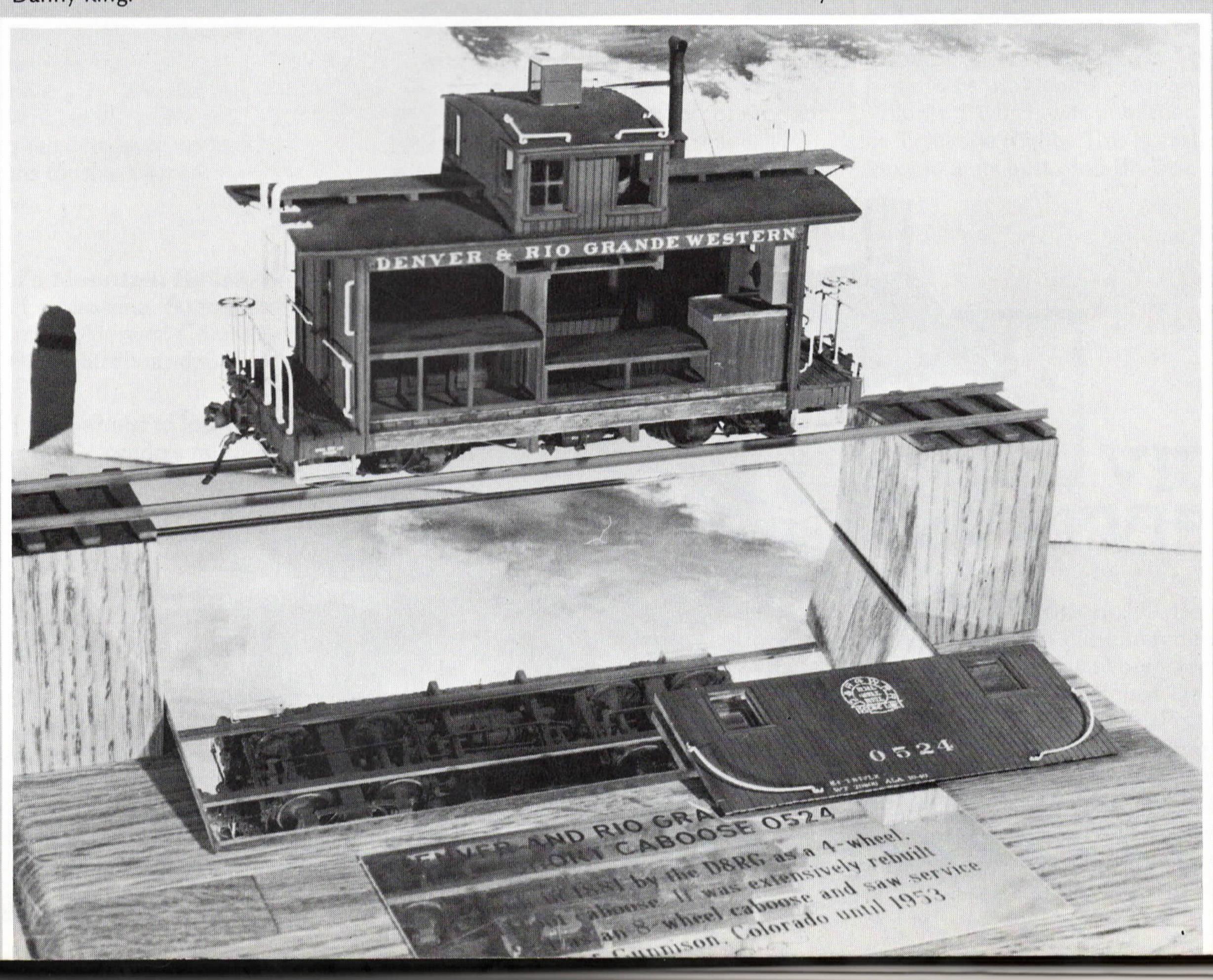
FIRST PLACE:
On3 South Pacific Coast Combine #47,
Don McKenney.

SECOND PLACE (not shown): HOn3 Private Car "Cleora," Richard Dorman.

THIRD PLACE (not shown):
½-inch scale G-Gauge Galloping Goose #5,
Danny King.

CABOOSES...

First Place:
On3 D&RGW Caboose #0524,
Myron Smith.
SECOND PLACE (not shown):
On3 RGS Caboose #0404,
Hank Graham
(Hank won the GAZETTE Award in Denver in 1982).
THIRD PLACE (not shown):
On3 Logging Caboose #1,
Don McKenney.





MAINTENANCE OF WAY ...

FIRST PLACE:
On3 Track-laying Machine,
Ken Hamilton.

SECOND PLACE (not shown): On3 Log Loader, Robert L. Grimes.

THIRD PLACE (not shown):
On3 Blacksmith Car #2,
Don McKenney.

STRUCTURES...

FIRST PLACE: On3 Rail Transfer, Robert L. Grimes.

SECOND PLACE (not shown): HO Knapp Bros. Gas Station/Store, Joseph Cirillo.

THIRD PLACE (not shown): S Scale C&S Jefferson, Colorado Depot, Todd Hackett.

DIORAMAS...

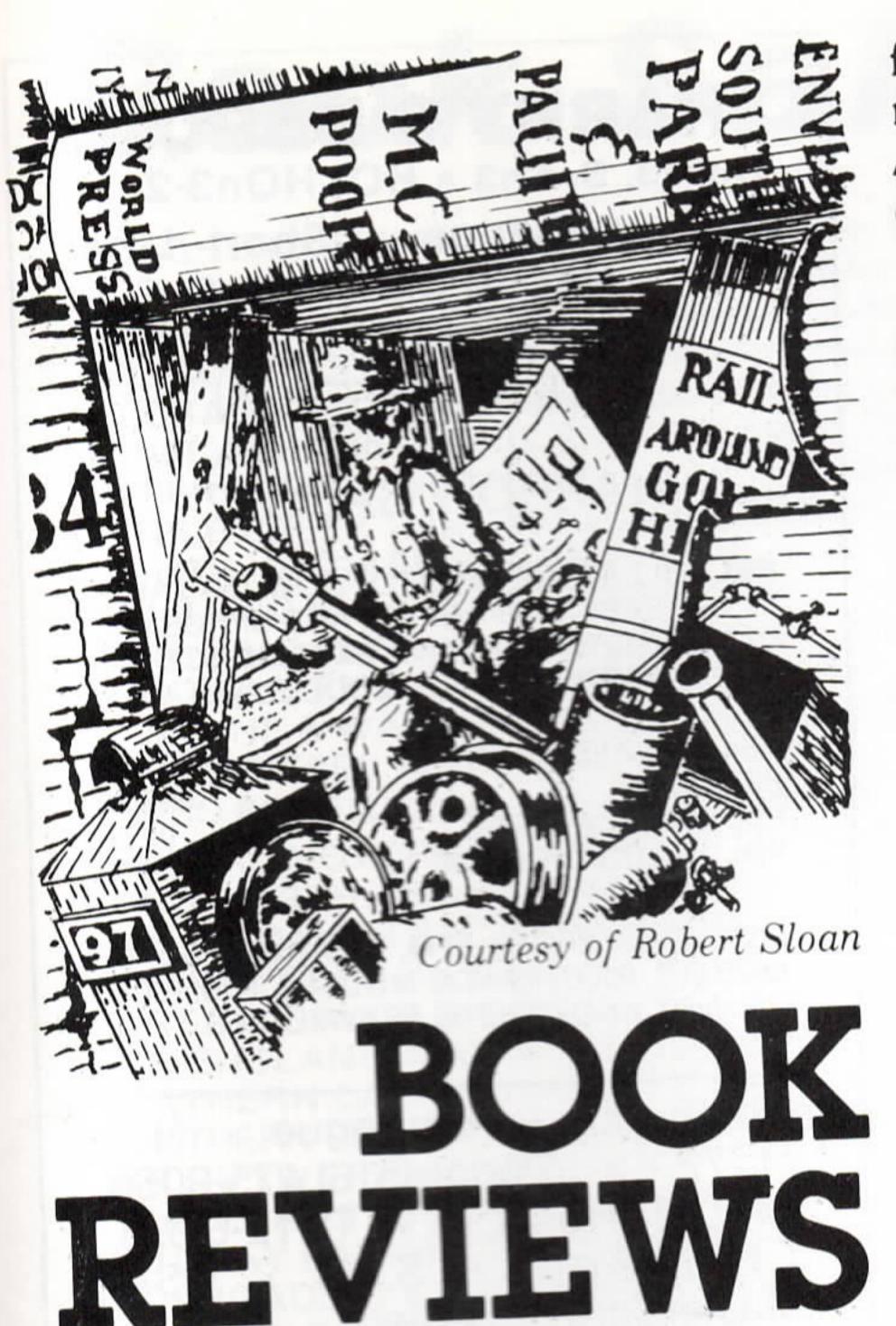
FIRST PLACE (see The GAZETTE Award above for photo): ½-inch scale C&S diorama, Joseph Crea.

SECOND PLACE (not shown): HO Ore-Sorting House, Myron Smith.

THIRD PLACE (not shown):
HOn3 Owl Canyon Diorama,
Dwyane Easterling.

S GAUGIAN AWARD... (not shown) Sn3 RGS 4-6-0 #20, Jim Booth.





Pacific Great Eastern Steam Locomotives, by Patrick O. Hind. The Bristish Columbia Railway Historical Association, P.O. Box 114, Victoria, B.C., V8W 2M1, Canada, 1984. Softcover, 54 pages, illus., \$10.50 plus \$1.50 postage.

After an introductory section on the Pacific Great Eastern, this book describes each of this standard gauge road's locomotives, #1 through #163. A roster is included at the end of the book. The description of each locomotive is accompanied by several photos of it. Of interest to me was locomotive #1 which was built by Manning Wardle of Leeds, England way back in 1874 as a 10-ton saddle tank engine. Most of the road's engines were large 2-8-0's and 2-8-2's. It is good to see complete locomotive descriptions for this interesting railroad. Bob Brown.

Colorado's Mountain Railroads, by Robert A. Le Massena, Sundance Publications Limited, Denver, Colorado 80203, 1984. Hardbound, 384 pages, illus, \$49.95.

One of the hardest to locate of the rare books on Colorado's railroads is the five volume softbound series on Colorado's Mountain Railroads published by The Smoking Stack Press in Golden, Colorado in the 1960's. Now these five volumes have been handsomely reproduced in a larger format, single hardbound book. Additional photos have also been added.

Colorado's Mountain Railroads alphabetically lists every railroad in Colorado and includes a short historical description of each road and a listing of its motive power. Photos of each line are generally near its description. Inevitably, given the obscurity of some roads, there are many

familiar photos; however, there are also a number of new and unpublished photos. All are presented in Sundance's usual clear layout and fine reproduction.

This book is invaluable as a reference tool. It cogently presents a readily usable listing of Colorado's railroads in all of their surprising variety. You will find information not only about the great lines like the Sante Fe or the Rio Grande but also the obscure lines such as the Little Book Cliff, my favorite road, soon to have its own book. I, for one, am glad to see Colorado's Mountain Railroads published in an eminently readable new edition. Charlie Getz.

Leadville: A Miner's Epic, by Stephen M. Voynick, Mountain Crest Publishing Co., Missoula, Montana, 1984. Softbound, 165 pages, illus., \$7.95.

Stephen Voynick is no stranger to books on mining, having authored a number of books on the subject. Voynick's latest book describes Leadville's mining history. Ironically, I came across it on a recent trip to Leadville. It was quite enjoyable to read this interesting history of Leadville's mining history in the comfort of a local motel, having just returned from reviewing the remains of that industry.

Voynick's book is more of a tribute to miners than a dry history of mining technology, and reflects his own years in the mines. In its pages you will find a complete summary of the changing technology of hardrock mining as well as a fascinating history of a typical mining camp and its changing fortunes over the years. Even modern mining at the Climax Mine is fully described, making this book not only useful for its historical value but also for its current description of modern mining techniques. I believe you will enjoy this book and it will give you a new appreciation of the mining industry that so many of you model. Charlie Getz.

Pino Grande: Logging Railroads of the Michigan-California Lumber Company, (revised edition) by R.S. Polkinghorn, Interurban Press, P.O. Box 6444, Glendale, CA 91205, 1984. Hardbound, illus., 176 pages, \$29.95.

The first edition of Pino Grande was published by Howell-North Books in 1966. This new revised edition brings many new photos, drawings and sketches to readers interested in the Michigan-California Lumber Company or California logging. The book is divided into seven chapters which cover the history of the Michigan-California Lumber Company, its 3-foot logging railroad, and the standard gauge Camino Placerville and Lake Tahoe Railroad which is still in operation. There are three album sections, one for the years between 1890 and 1918, one for the years between

1918 and 1949, and a third which shows what remains of the railroad today. There are also sections on logging camps and locomotives and equipment.

This revised edition has many new photos including several which I had not seen before of different kinds of rolling stock. All of the maps have been re-done and are more detailed than those in the original edition. The jacket has a beautiful Harlan Hiney painting which is also reproduced in four color litho in the front of the book. There are also several locomotive and car plans including a new plan of Shay #5.

I have awaited this re-issue of *Pino*Grande and I am not disappointed with the book. Even if you have the original there is enough new material in this edition to make it worth your purchase. If you missed the original edition, then by all means buy this book. If you're interested in logging, you will enjoy it.

Bob Brown.

The Cass Collection, Volume 2: The Logging Years (1901-1960), by John P. Killoran. Trackage Rights, Inc., P.O. Box 299, Scott Depot, WV 25560, 1983. Soft cover, spiral bound, 55 pages, illus.

This large horizontal format book is full of photos and information about the lumbering operations that became the Cass Scenic Railroad. The books are numbered and were limited to a run of 1000 copies. Each is full of large format photos of eastern logging including the large Shays that the area is known for. There are railcars, mills, log cars, and even a fish-stocking special. A roster of locomotives is also included. I found this book to be a welcome companion to Volume 1 which was published last year by Trackage Rights. This is eastern logging at its best. Bob Brown.



Imagination Station, P.O. Box 12394, Dallas, TX 75225 has entered the videotape field with a new two-part set of tapes called "Expanding the Denver & Rio Chama Western with Malcolm Furlow." Part 1 is now available and covers the construction of L-girder benchwork, risers, the track base and the laying of flextrack. The discussion is very detailed; Malcolm shows you how he builds so

rapidly and demonstrates his techniques and tools. Of the tools Malcolm mentions, the ideas of other people seem to be the most important. He finds ideas of other modelers in books and articles and modifies them to create his own version of his beloved Colorado railroads.

Malcolm also presents his philosophy of the hobby of model railroading. He muses about what the hobby means to him and discusses how his railroad may have trestles that are too high and curves that are too tight, but that it is his railroad and represents what Colorado means to him. There is also a sequence showing Malcolm's studio and shop. This room is obviously a place where he has gathered much of what is important to him: his music, his photography, and his models.

I thoroughly enjoyed this tape. I have always wondered how Malcolm accomplished so much in so short a time; now I have some idea of how he does it. He has developed shortcuts which work for him and speed up his modeling. Part 2 of this set of tapes will cover how Malcolm makes his scenery. Malcolm's performance in this tape is relaxed, entertaining, and full of humor. Another interesting feature of the tape is the use of action shots of the Denver & Rio Chama Western with sound effects. As the trains run by, you not only hear original music but the sounds of dogs barking, roosters crowing, people talking, and crickets "cricketing." I enjoyed this tape and I am looking forward to seeing part 2 when it comes out. Bob Brown.

Happy Holidays...__



from the GAZETTE staff.



PRESENTS



Union Pacific Steam in the 50's

Now available on

VIDEO CASSETTE in VHS and BETA II

From the Film Library of the ROCKY MOUNTAIN RAILROAD CLUB

The first of a series from the

IRVING E. AUGUST COLLECTION

Filmed in 16 mm Color during Steam's last days on the Union Pacific mainline near Cheyenne, Wyoming. From trackside. Mr. August captured the Big Boys and challengers while still in regular service. Also seen are 9000's, 9500's, 800's, 3500's and some early diesels including the turbine. 54 minutes. Color and dubbed sound. \$64.95.

Shipped Postpaid. Specify VHS or BETA II. VISA or MasterCard. Phone (303) 770-8421 Dealers Please Write

> OTHER TAPES AVAILABLE WRITE FOR BROCHURE

WB VIDEO PRODUCTIONS

6447 S. Heritage Pl. W., Englewood, CO 80111

HARRY'S DEPOT

O,On3, S, Sn3 - HO, HOn3-2, N Narrow Gauge - Short Line Logging Equipment

INTERESTED IN NARROW GAUGE?

PBL MILESTONE MODELS NOW AVAILABLE IN THE EAST (OUR HEARTS AND MINDS ARE OUT WEST). STOP IN AND EXPERIENCE THE FINEST NARROW GAUGE MODELS AVAILABLE

\$750.00 PBL K-36, 2 VERSIONS 695.00 **PBL K-37** PBL LONG CABEESE 92.50 PBL WSL CO. CABEESE 79.95

Sn3 ITEMS FROM: PFM, TRIANGLE SCALE MODELS, RIO GRANDE MODELS, TOMALCO. GRANDT, AND OTHERS AS AVAILABLE.

169 Rt. 112 · Patchogue · N.Y. 11772 • Phone (516) 475-9056 after 12 · Hours: M, W, Th 12-6 p.m. T, Fri 12-8 p.m. • S, 9-4 • VISA MasterCard accepted.

KEEP OUR ELVES BUSY

Buy a Grandt Line Kit!

Porter 0-4-0 Saddle Tank Loco in On3 Porter 0-4-0 Rectangular Side Tank Loco in On3

Plymouth Industrial Loco in On3 C&S/RGS Steel Underframe Stock Car in On3

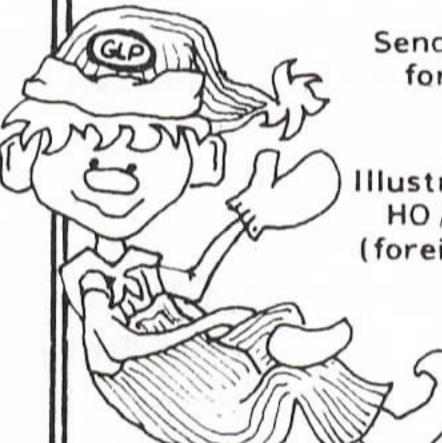
C&S Caboose #1006 in On3 DERGW Drop Bottom Gondola in On3 UTLX Frameless NG Tank Car (Gramps) in On3

Fairbanks-Morse #37 Dump Car in On3 DERGW 30' Flat Car in HOn3

D&RGW Wheel and Tie Car in HOn3

ALL PRICED JUST RIGHT FOR YOUR STOCKING

AVAILABLE AT YOUR DEALER OR DIRECT



Send Legal Size 37¢ SSAE for Current Price List

Illustrated Catalogs Available HO/N \$2.50 O/S \$3.50 (foreigh addressess ad \$1.00)

> 1040B Shary Court Concord, CA 94518 (415) 671-0143

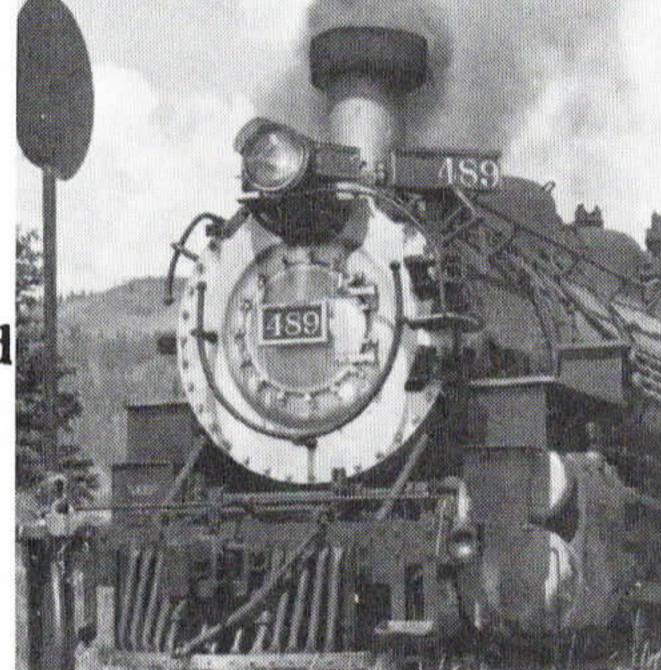


Best Railroad Tape Ever...!*

Green Frog Productions Presents Slim Rails Through the San Juans

A Saga of the Cumbres and Toltec Scenic Railroad

Acclaimed by many as the most entertaining and historically accurate tape of any railroad



LOOK AT THESE FEATURES

stereo sound professionally narrated original music professionally edited and MUCH more

\$10.00 tax deduction applies to purchase

only \$69.95 VISA Masterco





Green Frog Productions

950 Bream Ct. Marietta, GA 30067

(404)971-6276

Book Sale

15% Off any books listed here if ordered by December 31, 1984.

Minimum order \$35. Orders received after 12/31/84, a 10% discount will apply, with no minimum size order required. Prices include postage in USA. On orders under \$20, add \$1 for postage. Prices subject to change by public.

OI	n order	s under	\$20, add \$1 for postage. Prices subject to change by p	osa oubl.
ALLEGHENY, LIMA's FINEST, Huddlestone, 240 p. BALDWIN DIESEL LOCOS, 316 photos, 152 p., Kalmbach	ΦZ3		CHICAGO SURFACE LINES 3rd edition, Lind, 498 p.	25
CALIFORNIA's Rwy GUNS, WWII Artillery, Small, 90 p.	15		CLASSIC POWER 1, C&O 2-8-8-2 H-7 series, 48 p.	7
CASS COLLECTION Vol 2, the Logging Years, Killoran	11		CLASSIC POWER 2, Milw Bi-Polar Electric, 54 p. CLASSIC POWER 4, NP 4-8-4 locos, 100 p.	7
COLORADO's MTN RR's, Le Massena, 384 p., 49 full color			CLASSIC POWER 5, PRR Q CLASS LOCOS, 88 p.	13 16
CORISCANA & the ENNIS SUB: SP/SSW in Texas COPPER WIRES & IRON MEN, story of So Calif Edison	26 14		CIRCUS MOVES by RAIL, Parkibson/Fox, 352 p.	40
CRIPPLE CREEK Road, McFarland, 225 pages	25		COACH, CABBAGE & CABOOSE, SF mixed trains, McCall	40
DULUTH, MISSABE & IRON RANGE, King, 319 p. nice!	39		COLORADO's LONLIEST RR, San Luis Valley Southern	33
DUNELAND ELECTRIC, CSS&SB, Kaplan, 112 p.	20		COLORADO Memories of Narrow Gauge Circle, 130 p. COLORR Annual 9, Galloping Goose, etc., 126 p.	12 12
ED NOWAK's NYC, due out again in December F UNITS, by EMD, Mulhearn/Tibi, 80 pages	20 10		COLO RR Annual 10, C&S narrow gauge story	17
FT WAYNE & WABASH VALLEY, Bradley, 288 p.	36		COLO RR Annual 11, Mexican ng, Otto Perry, etc., 215 p.	17
FRISCO DIESEL POWER, Interurban Press	28		COLO RR Annual 12, DSP&P story COLO RR Annual 13, Florence & Cripple Creek, 203 p.	17
FRISCO POWER, Locos & Trains 1903-1953, Collias, 320 p	. 38		COLO RR Annual, 14, 232 pages	17
GENERAL MOTORS SD50 & GP50 DIESELS (NYP) GM&O NORTH, Olmstead (hardbound) 104 pages	18		COLO RR Annual 15, UP in Utah, Idaho & Montana	20
LIFE & TIMES of PACIFIC ELECTRIC	23 8		COLORADO & COLUMNICADO Springs & Cripple Creek	25
MINERAL BELT III, Digerness, 416 p. (back in print)	49		COLORADO & SOUTHERN, narrow gauge, Ferrell, 225 p. COTTON BELT, Strapac, 300 photos, 244 pages	35 25
NARROW GAUGE PICTORIAL Vol 1, locos, Robb	20		CROOKEDEST RR in World, Mt Tamalpais & Muir Woods	25
NEW ENGLAND ALCOS in Twlight, Hartley, 82 color phot NORTHERN CALIFORNIA RR's Vol 1, Silver Age,			DAWN of DIESEL AGE, Kirkland, 204 pages	30
NORTHERN PACIFIC Rwy, McGee, 300 pages (NYP)	45		DELAWARE & HUDSON, Shaughnessy, 488 p.	30
PRR HVYWT PASSENGER EQPT Plans & Photos, 100 p.	20		DETROIT STREET Rwy Vol 1, 256 pages DETROIT STREET Rwy Vol 2, CERA	20 28
PIKES PEAK TROLLEYS, Cafky, hardbound, autographed!	23		DIESEL LOCOS, MR Cyclopedia Vol 2, 160 pages	22
RAILWAY PASSENGER CAR ANNUAL Vol 6, 1984 RAILROADS of KANSAS CITY, Lynch, 144 p.	15	ST	DIESEL LOCO ROSTERS, McDonald, 124 p.	8
RAINBOW ROUTE (finally reportnted)	49		DIESEL SPOTTERS GUIDE UPDATE, Pinkepank, 162 p. DIESEL YEARS, Olmstead, 160 pages	8
NYC: GONE BUT NOT FORGOTTEN, 225 color photos!	38	$\overline{}$	DOODLEBUG COUNTRY, Keilty, 184 pages	29
OVERLAND to ROCKIES, Fox, 104 pages PINO GRANDE (back in print)	15	Ò	D-DAY ON THE WP, Staff, 224 pages	30
RAILS to DOOMSDAY, US Army in Phillipines, 75 p.	15	Ö	EARLY DIESEL DAZE, Sante Fe, McCall, large format	45
RED CAR DAYS, PE MEMORIES, Long, 64 p.	12	Ω	EAST BROAD TOP, Rainey & Kyper, 256 pages	37
RED RIVER LUMBER Co., Hanft, 306 pages	35	Щ	EAST BROAD TOP, Krause, 84 pages EASTERN STEAM PICTORIAL, Pennypacker, 384 p.	10 30
REQUIEM for NARROW GAUGE, 1947-52, 125 p. ST LOUIS CAR Co ALBUM, Young, 160 pages nice	25	بىز	ELECTRIC Rwy of MINNESOTA, Olson, 550 p.	30
STEAM, STEEL & LTDS 1915-48 passenger trains, 428 p.	30 45	7	ELECTRIC Rwy PIONEER, commuting on NWP	25
SUPPL to MODERN FRT CARS of NA, (NYP)bldr photos	18	Ξ	EVENING BEFORE the DIESEL, GTW, Foss, 444 pages FOGG & STEAM,28 color plates 14x10, 172 p., 120 photos	49
SWITZERLAND TRAIL of AMERICA, Crossen, 400 p.	45	0	FORTY FEET Below, Chicago's Frt Tunnels, Moffatt, 84 p.	10
TEHACHAPI, 8 color photos, Signor, super book! TRACTION CLASSICS Vol 1 thru the 1920's, Middleton,	44	0	FRISCO SOUTHWEST, McCall 120 pages	17
TRAIN WATCHERS GUIDE to NA RR's, 212 pages	41 11	Ш	GIANTS of WEST, UP super powered locos, Cockle, 208 p.	24
TROLLEY to the PAST, Young, 160 pages	20	8	GRAND CENTRAL STATION, Middleton, 160 p. GREAT NORTHERN, Wood, 544 pages	23
TWLIGHT of NEW ENGLAND ALCOS	18	ш.	GROWING UP WITH TRAINS, Vol 2, Steinheimer	19
V&O STORY, McClelland, Carstens (NYP) VALLEY DIVISION VIGNETTES: AT&SF in Calif.	18	R	HEADLIGHTS & MARKERS, Donovan/Henry, 400 p.	18
WABASH RAILROAD, Heimburger, 325 pages	35 39	B	HORSE Cars/Streamliners, St Louis Car Co., Lind, 400 p. INSIDE MUNI of San Francisco, McKane/Terias	23
WHISTLES BLOW No MORE, logging in Sierras 1870-1942	26	ш	400 STORY, C&NW, Scribbins	36 35
AC GILBERTS HERITAGE, 164 pages	14	-	ILLUS TREASURY of Rail Rapid Transit Systems & Cars	50
AGE of STEAM, Beebe & Clegg, 272 pages	25	8	INTERURBAN to MILW, CERA, 169 p.	15
AMERICA's RR's 2nd Generation, Ball, 285 color photos AMERICAN NARROW GAUGE, Krause, 256 pages	40	\geq	IOWA TROLLEYS, cover all Iowa, CERA, 300 pages IRON HORSES to PROMONTORY, Best 207 p.	25 27
AMTRAK at MILEPOST 10, Zimmerman	10		IRON HORSES of Santa Fe Taril, Worley, 3rd printing	49
APPLE COUNTY INTERURBAN, Yakima, WA., 130 p.	21		KETTLE VALLEY, Riegger, 240 pages	30
ARTICULATED Steam Locos of NA, LaMassena, 416 p.	45		KEY SYSTEM ALBUM, 220 photos, 120 pages	18
BALDWIN LOCOS, 700 builder photos, steam, diesel, electric B&O, THUNDER in Alleghenies, Carstens	35		LAST OF GREAT STATIONS, LA Union Terminal, 112 p. LAST of STEAM, Collias, 260 pages	12 25
BIG BOY, UP, Kratville, 98 pages	15		LOCOS of RIO GRANDE 1870-1977, 80 pages	10
BROWN's GUIDE to BRASS, 190 pages	14		MA & PA 2nd edition, Hilton, 210 pages	15
CABIN CARS of PENNSY book 2 Co.	45		MARSHALL PASS, D&RGW's transcontinental line MATCHES, Flumes & Rails, Diamond Match Co., 172 p.	23
CABIN CARS of PENNSY, book 2, 64 pages CALIFORNIA's Central Coast Rwy, Hamman, 309 p.	13 45		MEMORIES of NYC DIESELS, Carleton	18 30
CANADIAN PACIFIC, Van Horne's Road, large format	35		MEMORIES of NYC STEAM, Haas, 351 pages	35
CAR & LOCO CYCLOPEDIA, 1980 edition, 1,047 pages	60		McCLURE PHOTOS of Colorado, Pruett Publ. nice!	30
CARS of PACIFIC ELECTRIC Vol 1, City & Suburban, 224	10		MIGHTY 800, UP, Kratville, 138 p. MINERAL BELT Vol 1, Digerness, 416 p.	20
CARS of PACIFIC ELEC Vol 3, locos, etc. 336 p. CASS COLLECTION Vol 1, large format, 56 p.	13		MINICOAL DELTALLO D:	49 49
CENTENNIALS in ACTION, UP DD\$)X, Cockle, 88 p.	12		MINNESOTA's LOGGING RR's, King, 210 p.	35
CENTRAL VERMONT Rwy, Carstens	14			24
CENTRAL VERMONT Vol 1, 1830-1886, Jones, 192 p.	20		MIXED TRAIN DAILY, Beebe, a classic, 368 p. MODEL RRing with JOHN ALLEN, Westcott	30 22
CENTRAL VERMONT Vol 2, 1887-1910, Jones, 192 p. CENTRAL VERMONT Vol 3, 1911-1927, Jones, 192 p.	20		MODEL RRing Handbook Vol 1, Schleicher, 227 p.	11
CENTRAL VERMONT Vol 4, 1928-1940, Jones, 192 p.	20		MODEL RRing Handbook Vol 2, Schleicher, 177 p.	11
CENTRAL VERMONT Vol 5, 1941-1960, Jones, 192 p.	20		MODEL RRing Handbook Vol 3, Schleicher MLW to BOMBARDIER, 50 yrs of Also in Canada	11
CENTRAL VERMONT Vol 6, 1961- now, Jones, 192 p. C&O DIESEL REVIEW, C&O Historical Society, 228 p.	20		MLW to BOMBARDIER, 50 yrs of Alco in Canada MONON ROUTE, 318 pages	20 30
CHALLENGERS, UP, Kratville, 144 pages	19 29		MOTIVE POWER of UP, Kratville, 329 pages	40
CHICAGO & ILLINOIS MIDLAND, Wallin, 244 pages	33			28
CHICAGO's PASSENGER TRAINS, Olmstead, 136 p.	24		MOUNTAIN to MILL, Colo & Wyo RR, 200 p.	33
HI-COUNTRY BRASS, LTD. Wo ha	мон о	dit a ma	HI-COUNTRY BRASS LTD	

HI-COUNTRY BRASS, LTD. 10101 E. Hampden Ave. (2 mi. east of I-25) 303--368-9607 DENVER, CO 80231

We honor credit cards from Visa, Mastercard, Choice & American Express.

HI-COUNTRY BRASS, LTD. 985E Lomas Santa Fe Dr. (2 blocks east of I-5) 619-755-6130 SOLANA BEACH, CA 92075

o rail ho FLEX-RIGHT TRACK

The most complete line of turnouts, joiners, tie plates, rail braces, gauge plates, ties.

RIGHT-O'-WAY WAS FIRST TO OFFER ACCURATELY SCALED RAIL IN O and HO.

Used by museums and outstanding clubs from San Diego to Boston.

Actual photograms of rails

.148 n.s. .083 n.s. O gauge HO 131-36# 131-36# 99' \$44.00 (0.50#)

Add \$1.50 for shipping.

21st ANNIVERSARY SPECIAL...

good through January 31, '85. 18' of HO .083 FLEX-RIGHT \$15.50 postpaid. 99' of .083 ns rail \$12.50 postpaid.

LSASE for illustrated price list and rail data sheet.



Narrow Gauge Catalog and Lettering Guide

This lettering guide covers all popular narrow gauge roads, Colorado, West Coast, Midwest and East Coast Plans and data sources are listed by road, HO scale plans and lettering diagrams for over 200 cars and locos. number lists. More data in one place than any other source! \$4.00

Nn3 Manual 2nd Edition

Revised 48 page manual on how to model in Nn3 using Z scale mechanisms or narrowed N scale mechanisms. 144 scale plans for buildings, cars, locos. All known suppliers and parts listed. Articles on trackwork, standards. \$4.000 Rainbow Route, 416 page book, signed by author. \$49.00

Narrow Gauge Decals

make narrow gauge decals for the following roads in all scales (Nn3, HOn30, HOn3, Sn2, Sn3, On2, On3); Colo N 🚍 Locos. D&RG and Mears Silverton Roads, South Park - Colo. Central - Colo. Southern, (including Tiffany reefers Colorado work cars, Maine Two footers, Westside Lumber, Fancy Gold Passenger (all roads), South Pacific Coast, Cars & Colorado. Southern Pacific, N-C-O, NCNG, Pacific Coast, White Pass & Yukon, Sumpter Valley, Ohio River & Wester East Broad Top, East Tenn. & Western N. Carolina. Each set will do a minimum of 15 cars, many lots more. Each 🔙 includes all styles of lettering from the beginning of the road's history to the close. Prices vary with scale, number = colors, and amount of lettering.

Narrow Gauge Cabs, Tenders, and Superstructures

make brass engraved cabs, tenders, parts, and superstructures for a variety of railbuses and locomotives in all scales These are suitable for scratchbuilding, or converting existing mechanisms in Nn3, HOn30, HOn3, Sn2 Sn3, On2 or Only (No cabs or tenders in O scale). Loco kit: Sn3 Mason Bogie, \$90.

Railbuses: Casey Jones. Nn3 \$5, HO \$10, S \$20, O \$20. RGS 2 truck or 3 truck goose, N \$10, HO \$15, S \$20, O \$3 Loco Superstructure Kits: South Park 2-6-0 Nn3 \$50, C&S #9 2-6-0 Nn3 \$50, D&RG 0-6-0T Nn3 \$25, Nn3 EBT 2-8-\$25, D&RG 2-4-0 in HOn3 \$20, On3 \$40, Maine 2-4-4T: HOn30 \$20, On2 or On30 \$40. Maine 2-4-4T: HOn30 \$20, Onc. or On30 \$40. Maine 2-6-2 HOn30 \$20, Sn2 \$30, On2 or On30 \$40.

Cabs include D&RG class 48 and 56. D&RGW T-12. C-16. C-18. C-19. C-21. T-12. K-36. K-37. Colorado Midland 4-5and 0-6-0. Silverton Northern 3. 4 and 34. Colorado and Southern 2-6-0 and 2-8-0. Per cab: Nn3 \$5. HOn3 \$10. Sn3 \$10.

Tender Sets, 2 or 4 tenders of the same road per set, brass surface etched, must be cut out and glued or soldered together. Sets \$10 Nn3, \$15 HO, \$30 S. Sets are Silverton Northern 3, 4 and 34; C&S 2-6-0 and 2-8-0; D&RG class and original C-16; D&RGW C-18 #318, C-19 #346, C-21 #360-361, and RGS 20. Single tenders K-36 or K-37, Nn3 \$5 HOn3 \$7, Sn3 \$15.

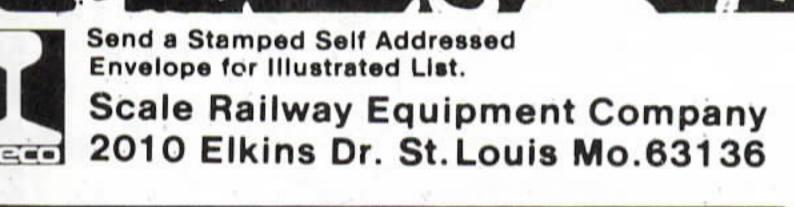
HOn3 Frame Conversion Kit to convert MDC outside frame 2-8-0 #473 to K-27. \$5. Sn3 Zinc Loco Frames for C&S 2-6-0, RGS 20 4-6-0 and D&RGW. C&S 2-8-0. \$15. Send SSAE for a detailed price list. Be sure to mention your scale and gauge!

ROBERT SLOAN

30 E. Pleasant Lake Road. North Oaks, MN 55110

HU-MINI O Scale Figures







Beat the Jan. 1 price increase

For more info, send stamp to:

P-B-L, Box 749-G, Chama, NM 87520

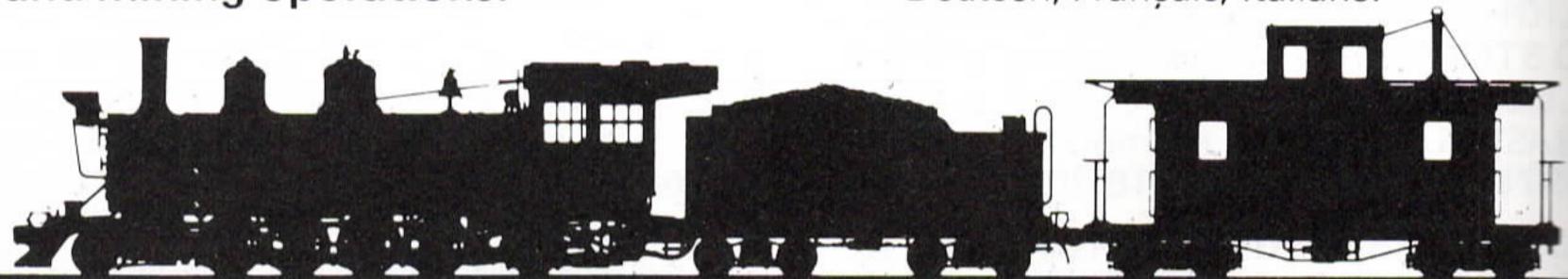
(505) 756-2419

sitteen sa

The Colorado Narrow Gauge Specialist in Europe

EUROPE's unique supplier devoted almost exclusively to American narrow gauge, branchlines, logging and mining operations.

Brass engines, kits and accessories in On3, Sn3, HO and HOn3. Fast and reliable mail order service. Large inventory We speak your language: English, Deutsch, Français, Italiano.



Rittech SA, P.O.Box 8, CH-1232 Confignon-Geneva, Switzerland. Phone 022 57 20 37

We accept VISA charge cards.



TERMINAL HOBBY SHOP

YOUR COMPLETE SELECTION OF MODEL RAILROAD EQUIPMENT.

Terminal Hobby is your one stop shop for the treasures that make this hobby interesting! Do you live too far from a full line hobby shop? Send us a note or give us a call.

We pledge to give you the best service. To double check your order and to correct errors with an exchange, replacement, credit or refund. And if it is not what you expected please return it.

New modeling ideas, products and projects fill the pages of model railroad catalogs and magazines. If you've seen it and it's available - Terminal Hobby Shop has it.

MAIL ORDER SERVICE

Postage paid anywhere in the U.S.

Please include \$1.00 handling charge on all orders.

0

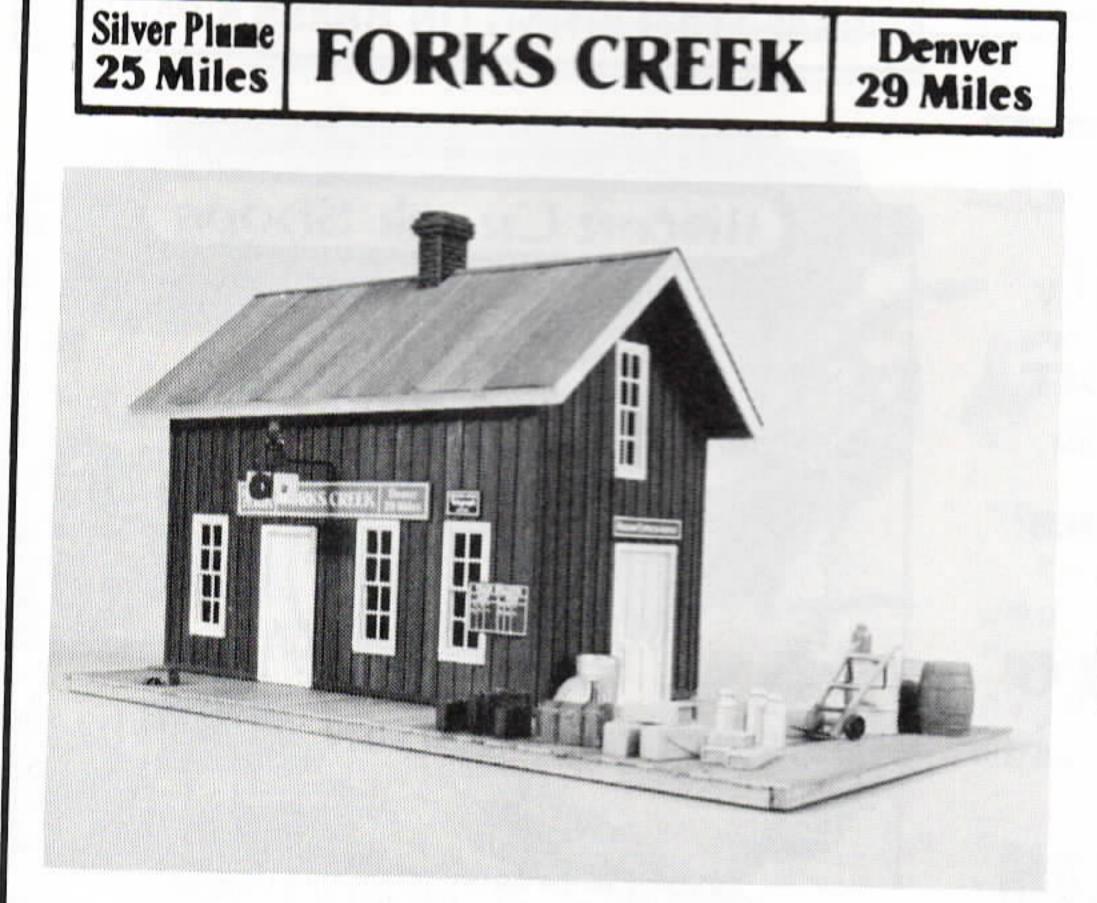
24 HOUR PHONE SERVICE (414) 461-1050 After hours calls and orders are recorded.

SEND CHARGE, CHECK OR MONEY ORDER Master Card, Visa and American Express accepted. Charges require a \$20.00 minimum order.

Terminal Hobby Shop 5619 West Florist Avenue Milwaukee, Wisconsin 53218

© 1983 Terminal Hobby Shop





SUPER ANCILLARY ITEM FOR Sn3

Following Harry Brunk's article "Up Clear Creek on the Narrow Gauge" in the Jan/Feb issue of the Gazette, the Brass Whistle is pleased to announce the "FORKS CREEK STATION" in 3/16 scale. Complete with styrene, urethane, and white metal castings, the kit was assembled by the Structure Company for the Brass Whistle and is NOW available through your favorite hobby shop.



BRASS WHISTLE, INC. 1665 Charles Street Rockford, IL 61108

ESCAPE TO S SCALE

S scale is the ideal size! Get into S or Sn3 today! Read the bimonthly **S Gaugian** magazine for articles, plans, photos, ads, \$16.00 a year; \$20.00 outside USA.

We offer these other books for you:

Sn3 MODELING—A 96-page softbound with many articles, photos and plans of S narrow gauge model railroading including color photos. \$11.95 and \$1.25 postage.

YOUR INTRODUCTION TO S GAUGE—72 pages of articles, photos, plans. \$6.95 and \$1.00 postage.

RIO GRANDE NARROW GAUGE by John Norwood. A 312-page 8½ x11" hardbound with 18 chapters describing the Rio Grande 3-ft. lines in southern Colorado and New Mexico from birth to death. 18 chapters, 8-page four-color section. \$39.95 and \$2.25 postage.

RIO GRANDE STEAM LOCOMOTIVES (Std. Gauge) 200-page 14 chapters, 26 folio drawings of standard gauge steam. \$23.95 and \$1.75 postage.

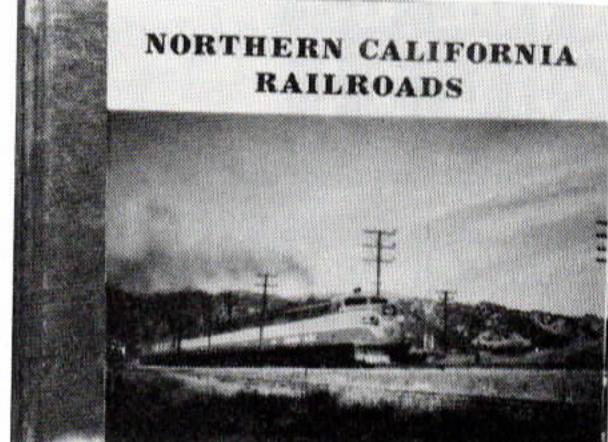
D&RGW NARROW GAUGE PLAN BOOK—56 pages (11x17") book of official diagrams of steam, freight and passenger cars, work equip. \$6.95 and \$.85 postage.

West Side Lumber Co. 74-page special issue of S Gaugian; Sn3 issue of S Gaugian, 60-page issue featuring this growing scale! \$4.00 each postpaid.

Send \$2.50 for our S/Sn3 product catalog.

Heimburger House Publishing Co. 310 Lathrop Ave. River Forest, IL 60305

NEW PICTORIAL



HARDCOVER

CRAFTSMANSHIP OF HIGHEST QUALITY

\$45.00 POSTPAID

NORTHERN CALIFORNIA RAILROADS

Volume II

A survey, in words and 267 pictures, of the vast variety of tracked transport thats served the region west of Reno and north of the Tehachipi Mountains in the busy years after WW II. Steam was making its last stand in an era of boom, with dozens of classes active; the forty-year old teakettles rubbed elbows with the newest generation of luxury streamliners. A wide range of shortlines operated into scenic back country, while Bay Area Commuters still rode in wide-windowed electric interurban brains. It was the last period in which railroads were primary carriers of both passenger and freight, an era closer in many ways to the turn of the century than to the 1980's. Pictures and text reconstruct the quality of the times, in a way that will appeal to the railway buff in all of us and to the Californian who wants to see what it was like then.

48 SPARKLING FULL COLOR VIEWS 219 RICH DOUBLE BLACK PRINTS 224 PAGES 11 X 81/2

MASTERCARD/VISA ACCEPTED.

SUNDANCE PUBLICATIONS Ltd., 250 BROADWAY DENVER, COLORADO 80203
TELEPHONE 303/777-2880

Send for FREE Catalogue

DESPLAINES HOBBIES

PROBABLY THE BEST LITTLE

NARROW GAUGE ◀

HOBBY SHOP IN CHICAGOLAND

OPEN 7 DAYS A WEEK

HO - HOn3 - N - O - On3 - S - Sn3713 Center Street, Des Plaines, IL 60016

Phone: (312) 297-2118

G B MINI

FINE QUALITY 1/4" SCALE

BRASS CASTINGS FROM

WESTERN PROTOTYPES.

Send 35¢ for complete list

GEMINI SCALE MODELS

P.O. Box 583

Alamo, CA 94507



HOn3 D&RGW BOX CAR KIT

- Realistic Just like the Prototype
- Beautifully Detailed
- Side Doors Slide
- Car Body is one piece with most of the detail molded (Roof Walk too)
- Precision Throughout Crisp and Sharp

KIT #130 less decals and trucks only \$9.95

THE RAIL LINE CO.

Narrow Gauge

BOOKS

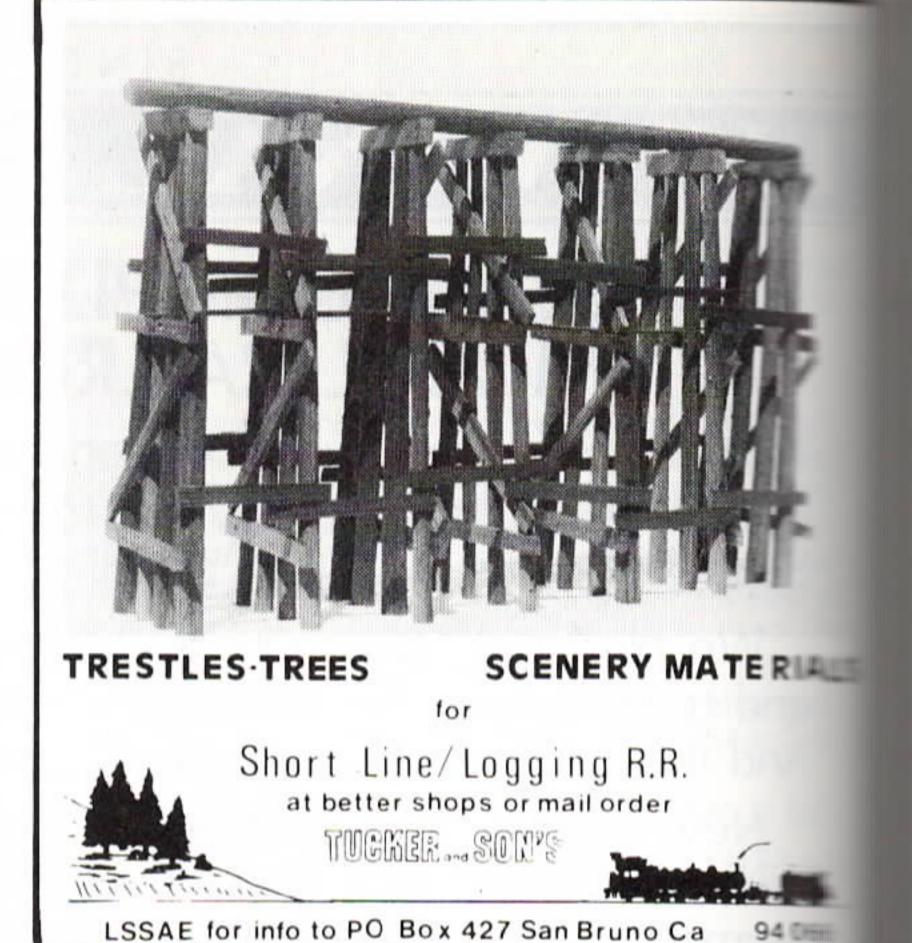
DOULE	
C&S Narrow Gauge	27.96
S.P. Narrow Gauge	26.00
East Broad Top	29.56
N.G. Pictorial Vol I: Locomotives	14.00
N.G. Pictorial Vol II: Pass cars	14.80
N.G. Pictorial Vol III: Freight cars	16.00

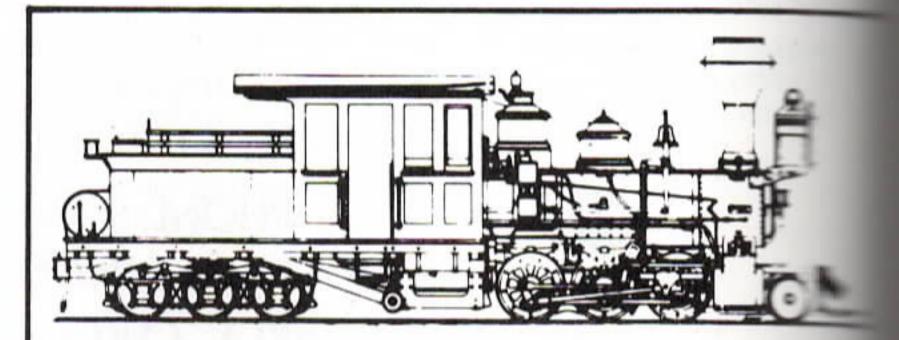
N.G. Pictoriai voi III: Freignt cars	16.00
GRANT LINE - HOn3	
5182 D&RGW Passenger car trucks	7.20
5186 Rio Grande 30' flat car	11.60
5187 D&RGW Wheel & tie car	15.00
5189 D&RGW Drop Bottom gon	coming
LSASE for current list	

Model Railway Supply Co.

Orders under \$50.00 Add \$1.50

5103 S. 338 Auburn, WA 98001 VISA (206) 939-7011 MASTER CARD





P.F.M. • WESTSIDE • LAMBERTHO-HO-HOn3 • NEW • USED

LITTLE TOWN HOBBIES

118 WOODLAWN CTR. LITTLETON, COLO. 80120 Phone 303/794-7714

CASSETTES NO.111



114 min.

CUMB.&TOL. 83
DUR.& SILV. 83

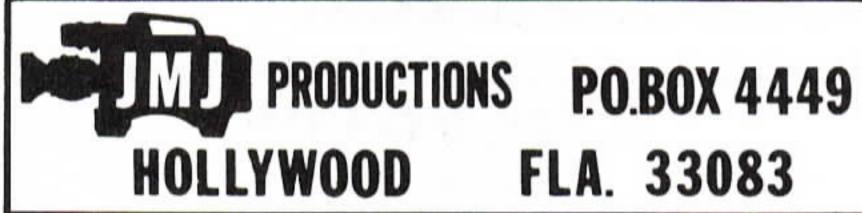
ABOVE PROGRAMS \$64.95 each postpaid

ALSO AVAILABLE, PREVIEWS OF OUR

PROGRAMS — APPROX. 60 MIN.— \$45.

(returnable for credit)

ORDER NOW OR SEND S.A.S.E. FOR FURTHER DETAILS AND FREE BROCHURE



ROUTE

O-ON3-HO-HOn3-N

AICOPFM-WSM-HM-SS- Key

A few of the Best
1949
Lines at Colorado Springs
Oldest 100% Model Railroad Shop

Try Us, We May Have It

(Wayne) LEMLE'S ROUNDHOUSE
2410 NORTH NEVADA AVENUE (REAR)

Colorado Springs, Colorado 80907 Only 65 Miles From Denver Mastercharge – Visa

Phone (303) 632-1969

Iron Horse Hobbies, inc.

22 N. ADDISON ST. Box 118

BENSENVILLE, IL 60106 Phone 1-312-766-7630

(1/4 block north of the Bensenville
Milwaukee Road Station)
New Business Hours:
T, TH, F, 12-9 p.m. Sat – 10 a.m.-6 p.m.
Wed, Sun. – 12-6 p.m.
Closed Monday
95% MODEL RAILROAD STOCK
ALSO OVER 20 DESIGNS
IN TRAIN T-SHIRTS
N SCALE BRASS IN STOCK OR
RESERVE FOR BEST PRICE!
GRANDT LINE PARTS:

HOn3 – On3 – Sn3 SSAE FOR LISTING ON BRASS & PAFT

HQ for BLW Photos!

"A BOON to rail historians, including Trains." So says David P. Morgan of the span (1860-1956), depth (15,000 photos), and service of H. L. Broadbelt's original collection of Baldwin Locomotive Works negatives.

170 page index! \$10.00, (including two 8 x 10 prints of your choice). Prints: 4 x 7 / \$1.00, 8 x 10 / \$2.00. If the engine bore a Baldwin plate, we've almost certainly got it—from 0-4-0 saddletankers to Mallets. No wonder D.P.M. acclaims Broadbelt as the Baldwin photo reference. Please, no dealers.

Money back guarantee. Write:

H. L. BROADBELT

146 Princess Margaret Drive Newport News, VA 23602 Colorado Springs and
Cripple Creek District Ry.

CRIPPLE CREEK SHORT

Through the HEART of the ROCKIES into the LAND of GOLD

Colorado Rail Annual No. 16 \$24.95 ppd

Colorado Railroad Museum

DEPT. S, BOX 10, GOLDEN COLO. 80402



MODELING SUPPLIES

FOR THE 5.3 ENTHUSIAS

DON'T FORGET OUR

"distinctive custom finish

SEND LSSAE FOR INFORMATION SHEETS

10905 FRUITWOOD DRIVE MITCHELLVILLE, MD. 2000 PHONE 301-262-8939



"THE DURANGO & SILVERTON NARROW GAUGE RAILROAD"

An unforgettable 24-minute Color Presentation of this historic ride through the spectacular San Juan Mountains of Southwestern Colorado — Narrated by C. W. McCall.

Price: \$49.95

+ \$2.50 POSTAGE & HANDLING COLORADO RESIDENTS ADD 3% SALES TAX

ALLOW 4-6 WEEKS FOR DELIVERY.

TO ORDER: Mail this form with check or money order to:

MPR Advertising, Inc.
Dept. G
P.O. Box J
Durango, Colorado 81301

Name						
Street						
City.	State.	Zip Code				

Sn3

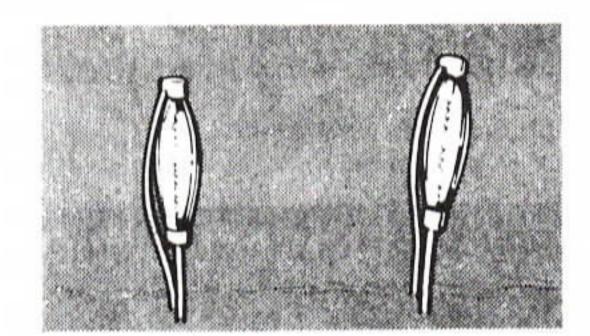
CUSTOM BUILT

READY-TO-RUN

Super Detail, Custom Painted,

San Juan Trading Company P.O. Box 3358 La Mesa, Ca. 92041

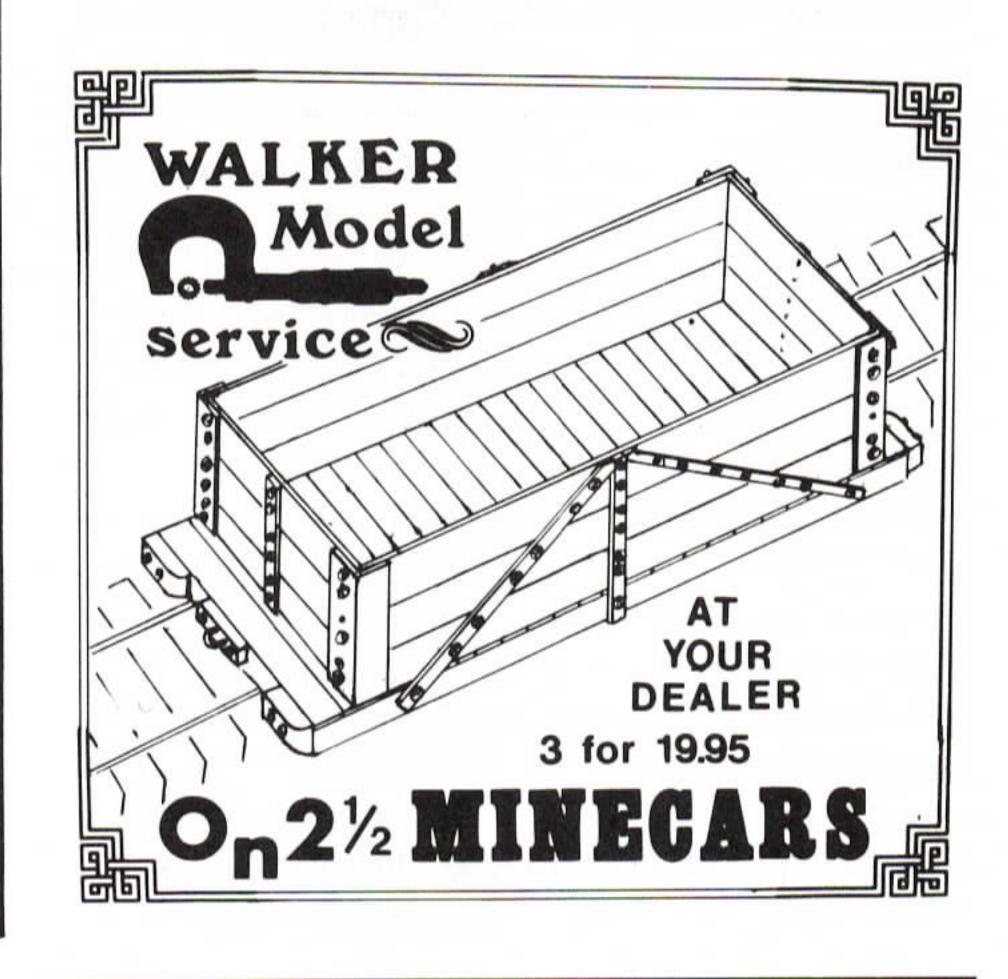
AX-90 1.5V AXIALIGHT

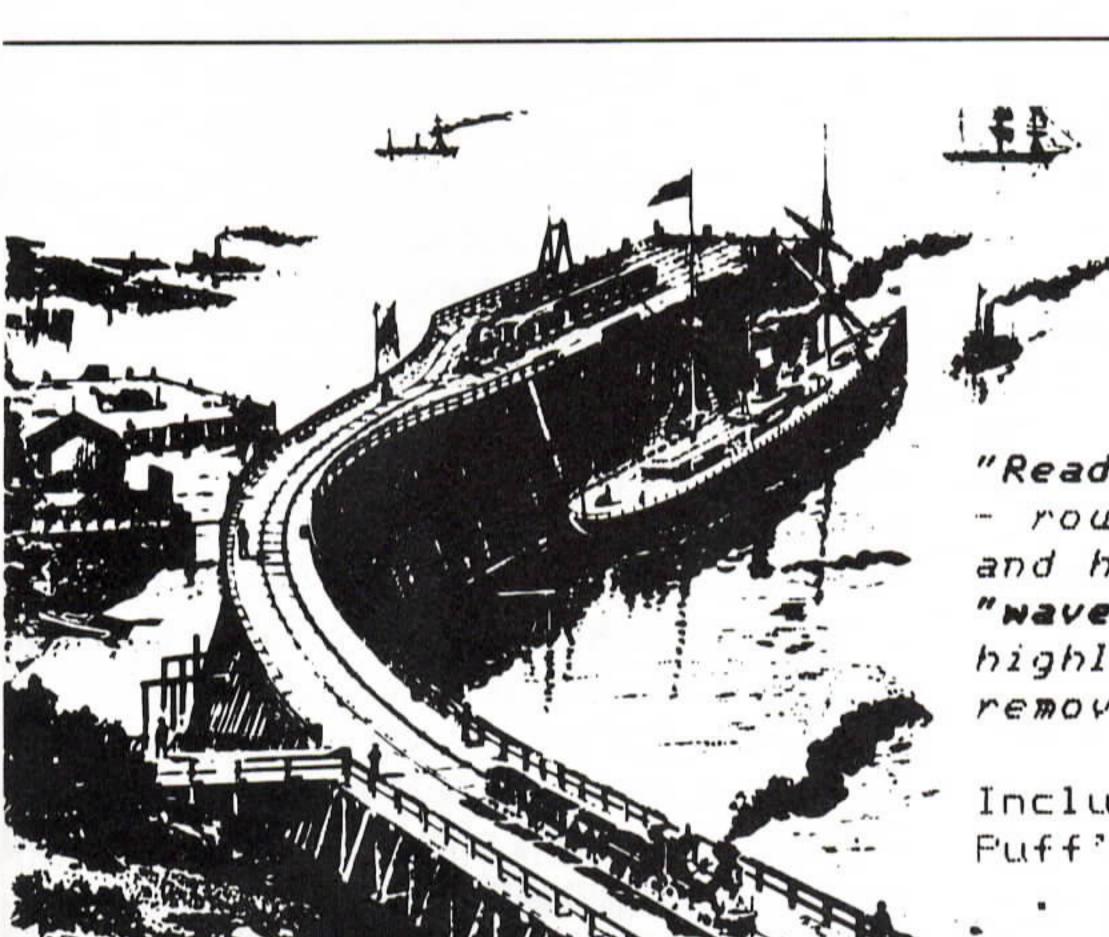


0.022 dia. by 0.060 length Insulated leads: 0.006 dia. by 6" length \$3.50 each SSAE for catalog sheet



P.O. BOX 8174 SALT LAKE CITY, UTAH 84108





Qik-Water

you build the models - we'll do the water!

"Ready to Run'", water for instant modeling. Smooth & reflective - rough & wavy - you decide. Say goodby to smelly, messy resins and hello to the "wettest water" possible. Even modest animated "wave action" is possible! Great for harbors, lakes & any opaque, highly reflective water scene. Incredibly fast! Permanent, removable, replaceable - your choice again!

Includes 27" X 72" roll of ultra-thin, medium blue-green film - Puff'n-Paks! for barnacles and foam additives - and instructions. only \$20.00/kit plus \$1.75 shipping . . catalog \$1.50

Box 7098 Colorado Springs, CO 80933

Reproductions

RIP TRACK

\$2.00 for 15 words or less, name and address free. Additional words .10 each. Ad must be paid for in advance.

Please furnish a street address for the GAZETTE's private records when you use a P.O. Box number in your ad. Type or print your ads neatly. Thanks.

RIPTRACK DEADLINES:

11/15 for Jan/Feb issue

1/15 for Mar/Apr issue

3/15 for May/June issue

5/15 for July/Aug issue

7/15 for Sept/Oct issue 9/15 for Nov/Dec issue

Sorry, no cancellations after deadline!

WANTED: Unbuilt Grandt Line On3 Porter, cab detail kit, and Micro-Mo drive. I have Michael Koch's "Titan of the Timber," mint condition, to trade. Bob Parsons, 4 Freeman Rd., Markam, Ontario, Canada L3P4G1. Phone 416/294-0984.

FOR SALE:On3, Sunset C-16 #223, TRO, \$600 Cdn (or \$460 U.S.); Crossing Gate Kit-Chili Coach (partially assembled), \$97.50 Cdn (or 75.00 U.S.); Crossing Gate Kit -Baggage \$85.50 Cdn (or \$65.00 U.S.); 2 brass On2 Town Models SR&RL coach bodies \$50.00 each Cdn (or \$38.25 each U.S.); Chooch "O" Machinery Sales Building, \$70.00 Cdn (or \$53.50 U.S.). Gary Ness, Box 1391, Wolfville, Nova Scotia, Canada, BOP1X0. 902/542-7386.

HOn30" 4-wheel cars by AHM Minitrains, all types. 50 cars for \$35. Peter Tuttle, 33 Stockholm Ave., Rockport, Mass. 01966.

WANTED: Two Foot Cyclopedia, Vol. 4 and 5. Walter Hering, 131 Spring St., Harrington Park, NJ 07640.

EAST BROAD TOP Mikado's: Hallmark HOn3 #16, 17, or 18, \$285 each; Hallmark EBT business car #20, \$89; P&S On2 SR #2, \$375. NJ res. add 6% tax. Stone Church Branch, P.O. Box 592, Navesink, NJ 07752.

GIANT RAILROADIANA listing includes D&RGW, EBT, CB-Q, Sandy River and Short Line material. SSAE please. Gary Altschuler, P.O. Box 274-C, Convent Station, NJ 07961.

WANTED: Finelines Vol. 1, Vol. 2, Vol. 9 #4, 5, 6, Vol. 10 #2, 3, Slim Gauge news Vol 1, Vol. 2, Vol. 3 #1. Locomotive Builders catalogs. Have 30 plus issues Finelines available for trade. Ron Rosenberg, 2 Highfield Rd., Harrison, NY 10528.

HOn3 +On3 +On2 Kits, Books, Brass, etc. Include SSAE for list. Hojack Hobbies, Inc., Dept. NG, 101 First St., Liverpool, NY 13088.

CUSTOM FINISHING: Finest quality, no short-cuts taken – all scales – steam or diesel – Brass only. Sound installation and detailing also available. Send SSAE or call 215/326-0368 for information, Roland Shilladay, 1989 N. Keim St., Pottstown, PA 19464.

EVERGREEN HILL Supts. office \$26.00, Water Tank \$14.00, Ash Drugs \$18.25, Buckmasters, \$28.00; Model Masterpieces Chessman \$19.25, Cimarron \$24.25, Gazette \$15.75, Brazelton \$27.75, Ashpit \$6.25; Classic Miniatures Leadville House \$17.50, Silver Plume \$11.25, Ophir \$17.50, Gold Hill \$11.25, Works \$15.50, Red Light \$10.50; REA Horseshoe Meadows \$31.75; Central Valley Bridge \$21.00; Campbell Iron Foundry \$18.25, Water Tank \$10.50, Truss bridge \$10.50; Yorke Prefab Station \$17.50, Yard Office \$14.00, Concrete Wharehouse \$14.50, Camp Houses (3) \$14.00; Rio Grande Marion Shovel \$37.25, Cranes \$9.25, Belt Unloader \$10.50, Mine hoist \$9.10, Dump car \$11.15, Power Poles \$9.10; Durango Press Track equipment set \$17.50, Perkins \$18.90; Chooch Posters \$5.60, Olson Loading \$4.90, Oil Tank \$9.15, Bridge Abutments #7029 \$2.70, #7028 \$3.85, Junk Piles \$4.55, Auto Junk Yard \$10.50, Country Store \$14.00; Quality Craft Coaling Station \$21.00; Taurus Cattle loading \$9.25; Daley Pipe \$14.00 + UPS \$2.00. Robert J. Chilton, P.O. Box 143 Abington, PA 19001.

On3 Overland Rotary Plow \$500; Ditchers \$450; C.B. Caboose \$150; PFM Caboose \$150; PFM Gramps, tanks \$150; W.S. Flat \$50; Sunset RGS #20 \$650 D&RGW #223 \$550; #271 \$575; All N1B painted, PFM sound C-16 #278 \$550; Westside #12 with caboose and three Simpson cars \$995 PFM K-27 \$1395; SS C-16 tender only \$75. HOn3 all classes from T-12 to K-37. S.E. Co., P.O. Box 9367, Wilmington, DE 19809. 302/764-7260.

On3 SHAYS, Shay kit, Ostd. Sunset USRA Heavy 2-8-2, O and On3 cars and kits, SSAE for list, Earl Martin, 11120 Rokeby Ave., Garrett Park, MD 20896. 301/949-0096.

On3 BRASS: CB D&RGW long caboose, mint \$90, Westside CONX tank \$60, NWSL 45T Diesel \$300, John Nichols, 14 Fisk Circle, Annapolis, MD 21401.

UINTAH MALLET, On3 CB, professional paint, beautiful, \$675, John Nichols, 14 Fisk Circle, Annapolis, MD 21401.

WANTED: Northwest Shortline HOn3 Spartan 4-4-0. Joe Waters, Route 5, Box 258, Forest City, NC 28043. 704/245-6631.

FOR SALE: Fine Scale kits #'s 220 (Chester Rawlings) and 225 (Sewall's Foundry) to be sold as pair only for \$135. SSAE for any correspondence. Please enclose street address for UPS. John A. Hubbard, P.O. Box 146, Orchard Hill, GA 30266.

HOn2½: Lambert – 1 pair R&L 150mm Turnouts \$10.00; 1 pair 200mm R&L Turnouts \$10.00; 1 box 75mm straight (10 pieces) and 1 box curved track, both for \$10.50; 1 box 500mm Flextrack \$17.50; Work Goose #6 (powered) \$175.00; Joe Works 0-4-0T Forney \$36.00; Yorke Coke Ovens \$15.00. Please add \$2.00 shipping. Dave Walls, 13504-A Orange Sunset Drive, Tampa, FL 33618.

LOWEST PRICES new and used brass, example Westside B&O P-7 O scale \$400. Large list new and used O/On3, S/Sn3, Craftsman kits, business SSAE for list. Falls Scale Models, P.O. Box 531, Cuyahoga Falls, OH 44221. 216/929-8528.

LATHE: Never used Machinex 5" - 24" Lessed model 0-514-01 with drill press \$4000 or best offer. Gary Enghe, 8107 Oakwar Ave. Munster, IN 46321. 219/972-0535

RESISTANCE soldering unit, Hotip mode 202 0-200 watts, complete unit used little, \$100.00. Gary Enghe, 8107 Oak Ave., Munster, IN 46321.

On3 BALBOA C-21 complete frame redeing over \$150.00 in castings, painted, PFM sound, KTM gearbox, micro-mass \$600.00. Gary Enghe, 8107 Oakwood Munster, IN 46321.

ALL DRGW On3. PFM T-12, sound, \$575.00; Balboa C-21, sound, gear \$495.00; IHM K-37 from kit, painted, \$575. PFM 2-6-6-2 L-77, painted, sound, \$795. Sunset M-75, TRO, \$595.00; D.P. O.P. den kit \$115.00; PFM Uintah water car, painted, \$65.00; ADDM Texaco tank car kit, \$75. LaBelle R.P.O. kit \$33.00, Tomalco pipe kit, \$18.00; Tomalco work Gon. kit, \$13. Tomalco 30' Reefer kit, \$20.00; Tony Durong Merribe St., Sturgis, MI 49091. 616. 5617.

FOR SALE: Westside HOn3: T-12 4-6-0, C-2-8-0 #278, both test run only, excellent condition, original boxes. \$110 each or offer. Peter Becker, 438 Merrimac Conselle, IL 60172.

HOn3 PFM K-37 latest \$350; K-28 early ltd \$200; Benson Shay, ptd. w/o letter \$300; PSC two truck Shay \$275; WSM #278 ptd/ltd private road modified \$100, 16 ptd, heavy weathering \$125; C-16 ptd/ltd private road \$100; C-25 ptd/ltd proad, modified \$120; NCNG #9 ptd/ltd proad modified \$120; NCNG #9 ptd/ltd proad modified \$100; Lambert C&S 260 weather \$140. We trade for other scales specialize in custom painting, sound instantion, and kit assembly, 60 day delivery for quotes or call Dave's Custom Models E. Empire, Bloomington,, IL 61701. 309 E5564.

WANT: HOn3 D&RGW K-28; must be perfect condition. William H. Radcliffe 3579 Victoria Dr., Lot 8, Baton Rouge 70805.

TRADE, Sn3 K-27, PFM, mint in box, for D&RG, RGS loco. W. Harper, 2505 High Carrollton, TX 75006. 214/245-5861.

WANTED: Book, "Ride the Sandy River PFM. David W. Powell, Rt. #5, Box Texarkana, TX 75501.

BOOKSEARCH and find service: buy, selftrade. LSSAE and your want list to Wiza-#5, Box 443B, Texarkana, TX 75501.

Sn3 Sunset K-28 mint TRO w/box \$5000 Kalmbach video tapes, VHS \$50.00 Paul Ellis, P.O. Box 2122, Colorado SCO 80901. 303/633-6661, x168 days

NOW AVAILABLE: Sundance's great recation of the LeMassena classic, Colomountain Railroads. Mail your order \$49.00 prepaid. Sale: LeMassena's Articon Steam Locomotives of North America postpaid (originally \$45.00). MC/Visible Silverton Standard, Box 187, Silverton 81433.

NEW COMPANY forming: River City Locomotive Works wants your ideas on new products in O and HO white metal. Respond on postcard with return address to: RCLW, 3300 South Oak, Austin, TX 78704.

TURNOUTS: HOn3, HO, Sn3, S, On2, On3, ¼AAR, O Gauge Scale drawings of narrow gauge equipment: D&RGW, C&S NCNG, SP and others. Catalog \$1.00. Darr's Scale Models, Box 81, Hawthorne, NV 89415.

SELLING HOn2½ SR&RL's engines, cars and accessories, assembled and kits. Several discontinued items. LSSAE to Louis Bentley, 11050 Bryant, #164, Yucaipa, CA 92399.

WANTED: C.P. Huntington (SP#1, 4-2-4, HO, Brass); UP Photographers Car by Wabash Valley (Red Ball). Swackhamer, 1482 Hamilton Way, San Jose, CA 95125.

O/On3 COLLECTION: Painted, detailed for prototypes, excellent condition: California Western M-80 (IHM Mack Bus) \$325; RGS #455 (PFM, 1963) \$450; RGS #20 (PFM, 1961) \$400; RGS #15 (Kemtron, C-16 Inter.) \$225; D&RGW #278 (Sunset, C-16) \$325; D&RG #106 (Kemtron, CL-48) \$150; DSP&P #44/8 (LMB, Mason Bogie)\$425; Climax Kit (PSC, 45 tons) \$325; SSAE for details, P. Thormahlen, P.O. Box 813, Georgetown, CA 95634. 916/333-1707.

On3 GRANDT trucks, Darr Switches, O scale Atlas track, switches, On3, HO, for Flyer or Lionel. James Reno, P.O. Box 13311, So. Lake Tahoe, CA 95702.

TRADE On3 Darr switches, PS Flex track for Atlas O scale switches and track. James Reno, P.O. Box 13311, So. Lake Tahoe, CA 95702.

TRADE for Lionel: On3 K-36, K-28, C-21, 16, CS 60, 74. Shays, Heislers, Climax, Uintah, SP 8, 9, 18, 4-4-0, Brass Freight and Passenger Cars. James Reno, P.O. Box 13311, So. Lake Tahoe, CA 95702.

WILL THOSE who contacted me on my CS 60, 74, SP 8, 9, 18, contact me again. James Reno, P.O. Box 13311, So. Lake Tahoe, CA 95702.

TRADE HO SP brass engines On3 Brass Engines, Freight, Passenger Cars for Lionel. James Reno, P.O. Box 13311, So. Lake Tahoe, CA 95702.

On3 SUNSET RGS No. 20 \$600., D&RGW No. 278 w/pilling domes and reworked drive \$400. Westside O scale SP Tw-8 \$525. All in mint condition. Back issues of Gazette and Mainline Modeler, including first issues! LSSAE to Rod Aszman, P. O. Box 152, Mt. Shasta, CA 96067.

Sn3 C-16 by PFM. Brand new, never run, in original box, \$185, postpaid. Cashier check or money order only, please. Write first to avoid conflicts. All inquiries answered. Jim Counihan, 2615 N.W. Princess St., Corvallis, OR 97330.

O/On3: K-27, C-19, C-16, 4-4-0, 2-8-0, Shays, Heisler and Climax. Freight, passenger and building kits plus detail parts. Walkaround for SSII. SSAE for list. Pacific Coast Railroad Supply, E. 7607 Beverly Dr., Spokane, WA 99212. 509/924-6919.

On3 Clean-up, kits, structures, parts and rolling stock, mostly new, some built, WMC RGS #20, IHM #461, LMB 2-truck Goose. SSAE. Richards, P.O. Box 375, Woodinville, WA 98072.

HOn3 PFM 2nd run K-28, no box \$185.00. Bal. 4 car set w/PFM coach/sleeper, C/P D&RGW \$350.00. SSAE. Richards, P.O. Box 375, Woodinville, WA 98072.

FOR SALE: WSM #3 Heisler, On3/O trucks, custom painted, light weathering, constant lighting, original box, \$450.00. Keith R. Parker, 1818 N.W. Forest Creek Dr., Silverdale, WA 98383. 206/697-6171.

DSP&P HOn3 Wood beam trucks - custom cast, limited run, matching brake beams available. Used by C&C, C&S, UP, Sumpter Valley, logging, SASE. Robert J. Chilton, P.O. Box 143, Abington, PA 19001.

FOR SALE: Back issues Gazette, Finelines, other model magazines, rail books, other railroadiana. LSSAE for list. Vallette, Box 447-R, Bethayres, PA 19006.

FOR SALE: Magazines 1916-1980: RAIL-ROAD, RAILFAN, RMC, TRAINS, MODEL RAILROADER, MODEL MAKER, RAILWAY AGE, GAZETTE. RLHS Bulletins 1930-1978; Pennsylvania Railroad calendars 1935-1958; Locomotive, carbuilders cyclopedias 1879-1974. Train catalogs: PFM, Alco, Westside, Varney, Mantua, Marklin, Rivarossi, Fleischmann, others. Baldwin locomotive magazines 1923-1950. Bound Street Railway Journals 1903-1907. Specify wants. 80¢ SSAE. Ben Smith, 861 Ronnie Lane, Philadelphia, PA 19128.

BUY-TRADE-SELL On3: Brass locos by most importers: NJ Sumpter Valley 2-6-6-2 #7 of 55, new, ptd. black, no lettering, \$1450.00. PFM new D&RGW T-12 \$500. PFM RGW #20 \$425 ptd. Max gray. 4-4-0 (D&RGW) ptd private \$350. Building kits by Yorke: Feed Store and Annex, Lake City Grocery \$56. Cook House \$25. Whiteground Loco and Machine Shop \$68. Boiler House \$68. The Structure Co. Grand Central Gold Mine \$62. Evergreen Hill Nevada Country RR Supply \$57, Buckmaster garage \$67. 30's gas station \$30. Yard Supply \$49. Scale Model Industries kits. Car kits by Grandt: tank cars \$38 6-pack \$190. C&S Caboose \$33, interior \$8. Stock Car \$37. Russian River, Calaveras Skidders, log trucks and water tank. Back Shop Gramps tank car kit \$80. Simpson, V&T, Winter Flanger O.C., \$53. Detail Parts from Grandt, Evergreen Hill, Precision, Detail Associates Back Shop, Chooch, V&T, Walker, Bowser, MV Lenses. All CHB kits and parts in stock. New books: "Rio Grande Narrow Gauge" by Norwood, \$33. Special: Mitchell Spray booth complete with extension, turntable, timer, lights, thermostats, vent. kit, \$285. Add \$2.00 p/h under \$100. Bruce Saylor, Audubon Railway Supply, 2836 Leon Ave., Audubon, PA 19403. 215/666-6572 after 5 p.m.

FOR SALE: HOn3 locos, cars, kits, structures, logging, HO On3. LSSAE for list #6. Steve Zonay, Box 4767, Ocala, FL 32678-4767.

S and Sn3 kits, parts. HO and HOn3 kits, parts and brass. SSAE to Central Montana Shops, 1005 Toole Circle, Billings, MT 59105.

O.R.&W.: Writing a book on the Ohio River and Western narrow gauge (Ex Bellaire Zanesville & Cincinnati). Need information and photographs. Edward Cass, 21262 Byron Road, Shaker Hts., OH 44122.

FOR SALE: Controlling interest. One dollar and other considerations. Operating std. gauge steam tourist railroad. Est. tangible assets \$180 thousand dollars. Contact: R.Y., 501/253-7329.

WANTED: HOn3 C&S and DSP&P. Especially Key C&S #58, #60 and #69 2-8-0's. Only mint in original boxes. State condition and price first letter. Alvin H. LaCour, 1411 19th St., Woodward, OK 73801. 405/256-6876.

On3 TOMALCO (Timber Creek) cars assembled, painted and ready to run. With Grandt Line trucks and Kadee On3 Couplers. Full underbody detail 3000 Series Box Cars \$48.00; 30' Reefers \$48.00; Stock cars \$52.00; Gondolas \$40.00; Flats \$38.00; Caboose, both long or short \$58.00; Coach or combine \$68.00; SSAE for photos and additional information. Add 5% for shipping. D. J. Custom Builders, Rt. 1, Box 52, Defiance, MO 63341. 314/987-2434.

Sn3 TOMALCO Cars, assembled, painted and ready to run, with Grandt Line Trucks and Kadee #4 couplers, full underbody detail, 3000 Series Box cars \$36.00; 30' Reefers \$36.00; Stock Cars \$40.00; Gondolas \$34.00; Flats \$32.00; CAboose, both long and short \$42.00; Coach or combine \$54.00. SSAE for photos and additional information. Add 5% for shipping. D.J. Custom Builders, Rt. 1, Box 52, Defiance, MO 63341. 314/987-2434.

HOn3 TOMALCO (Timber Creek) cars, assembled, painted and ready to run, with Grandt Line trucks and Kadee HOn3 couplers, full underbody detail, 3000 Series Box Cars \$19.50; 30' Reefers \$19.50; Stock Cars \$22.00; Gondolas \$17.50; Flats \$16.00; Caboose, both long or short, \$24.00; Coach or combine \$30.00. SSAE for photos and aditional information. Add 5% for shipping. D.J. Custom Builders, Rt. 1, Box 52, Defiance, MO 63341. 314/987-2434.

OLD TIMERS, remember Balboa "Slim Princess" Investment Castings? I need them! C&S/RGS reefer kits. Balboa and Westside HOn3 brass Bettendorf, 4' wheelbase archbar, and passenger trucks. Any amount. State condition and price first letter. Alvin H. LaCour, 1411 19th St., Woodward, OK 73801. 405/256-6876 after 5 p.m. CDT.

WANTED: On3 D&RGW Sunset K-28 and PFM K-27 Kodama, must be mint TRO in original box. Also D&RGW open platform passenger cars, and other rolling stock, structures and autos. Must be built-up, high quality only. Please send price and photos (if available) in first letter. I will return all photos. Keith Blanchard, 11121 MacMurray St., Garden Grove, CA 92641.

"DOING THE WHITE PASS" by Howard Clifford. Exciting book on the Klondike Gold Rush and building and operation of the WP&YR narrow gauge. Photos, maps and complete locomotive and passenger car rosters. Paperback \$5.00 including shipping. Sourdough Enterprises, 16401 3rd Ave., S. W., Seattle, WA 98166.

HISTORY — PRESERVATION WORK READ THE



CRS TELEVISION

presents

The Gumbres & Toltec Scenic Railroad

- * Available in VHS or Beta
- * 48 full color minutes!
- ★ Exclusive ACCUSOUND Recording
- * No narration, No music,

ALL natural sound!

* ". . . well worth watching."

 $M.R.\ Magazine$

Send \$49.95 to

CRS TELEVISION P.O. Box 23805 Milwaukee, WI 53223



Seriously Modeling Colorado?

The next best thing to being *here* is drawing upon the resources of books on Colorado mining, architecture, scenery, history, ghost towns, mining camps, historic photographs — and lest we forget — railroads.

Selections by and for modelers, sticklers for accurate prototypic inspiration and lovers of Colorado's past.

Your name and address brings our free *Modeler's Book List* via first class mail. Foreign requests answered by air mail.

CHARING CROSS STATION

Main Street • Silver Plume, CO 80476 (303) 569-2108

ADVERTISER INDEX

Α.		Model Die Casting	10
American Model Builders Inc.	13	Model Railway Supply Co.	94
AW Industries	66	MPR Advertising Inc.	95
В.		N.	
Bitter Creek Shops	94	N. J. International	12
Bob Brass	76	Narrow Gauge Model Shop	13
Brass Whistle Inc.	93	Gary Nash	13
H. L. Broadbelt	94	Northwest Shortline	20
ri. L. broadbeit	J .	Ο.	
CILD Madala	76	Original Whistle Stop	0
C.H.B. Models	2 0.00	Overland Models	99
Caboose Hobbies	66 35		33
Gary Carter	100	P.	F ((0)
Charing Cross Station	10 98		5, 66, 91
Charlu's Trains	15	Pacific News	24
Charly's Trains Cheat River Coal & Lumber Co.	56	Pacific Short Line RR Museum	21
	11	Peninsula Hobbies	12
Cibolo Crossing		Power Systems, Inc.	100
William J. Clouser	20 94	Precision Scale Co.	100
Colorado Railroad Museum	99	Prototype Modeler (PTJ)	14
Coronado Scale Models		R.	
CRS Television	98	R & D Supply Co., Inc.	4
Crummy Products	15	Railline Co.	94
D.		RG&W Shops	20
Darwin Publications	76, 77	Rick's Grande Narrow Gauge Car Sho	p 13
Des Plaines Hobby Shop	94	Right-O-Way	91
Distinctive Scale Models	10	Rio Grande Models	77
Durango & Silverton Narrow Gauge	95	Rittech	91
F.		R. Robb, Ltd.	14
Fifth Nat'l N G Convention	4	The Rock Quarry	18
Finescale Models	56	Ron's Art Graphics	10
Flying Zoo	8	Roy's Train World	56
Friends of the East Broad Top	98	Bill Roy	56
G.		Russian River Railroad Co.	21
Gauge One America	11	S.	
Gazette	67	S Gaugian	93
Gemini Scale Models	94	San Juan Trading Co.	95
Grand Imperial Hotel	11	Sandy River Car Shops	34
Grandt Line	90	Scale Railway Equipment Co.	91
Great American Buckle Co.	21	Silverton Specialties Co.	15
Green Frog Productions	90	Russ Simpson	21
н.		Robert Sloan	91
Harry's Depot	90	Sundance Publications	8,93
Hi-Country Brass	91	T.	
•	45	Tall Timber - Short Lines	15
The Hobby Barn Hod Carriers Ink	8	Taurus Products	
nod Camers ink	O	Terminal Hobby	91
	2.4	Tinkertown Inc.	
Innovision Productions	34	Tomalco	13
Iron Horse Hobbies Inc.	94	Trainmaster of Denver	14
J.		Trains of Texas	34
Jesse Jones Industries	20	Triangle Scale Models	66
JMJ Productions	94	Tucker and Sons	94
K.		U.	
Kachina Press	12	Utah Pacific	00
Keller Engineering	45		2.0
Key Imports	19	V.	-
Tom Klinger	56	V & T Shops	92
M. F. Kotowski	40	Vintage Reproductions	93
		W.	
Lambert Associates	2	W. B. Video Productions	90
Lemle's Roundhouse	94	Walker Model Service	95
The Little Depot	92	Wallace Enterprises	56
Littletown Hobbies	94	Wm. K. Walthers, Inc.	
	<i>3</i> -1	White Ground Model Works	77
M.	0	Y.	
Mainline Modeler	12	Thomas A. Yorke	21
Micro Engineering	13		
Mini-Structures	56		

Address Changes, Mailing Lists, Air Mail, and Other Matters

Moving? We want to be the first to know your new address – but we must have your *old* address too preferably in the form of your old mailing label. It would be nice if you could put your mailing label on the same card or letter with your new address.

Shhh!!! From time to time we sell our mailing list to carefully selected firms who sell products believe would be of interest to our readers. If you don't want us to sell your name, just drop us a note or put the words "no promo" on your renewal notice the next time you renew.

Overseas subscribers only! Air Mail subscriptions? We still do not offer them. However, if you absolutely must get your GAZETTE by air mail, send \$25.00 extra for the postage and special handling costs. (That's \$45.00 total.) We will endeavor to send your GAZETTEs by Air Mail until the rates go up again, at which time you must send more money or we will just extend your subscription appropriately and send it by surface mail.

Coronado Jaj

SCALE MODELS

Fast Mail Order Service is Our Specialty!!

1544 E. CYPRESS ST. PHOENIX, ARIZONA 85006

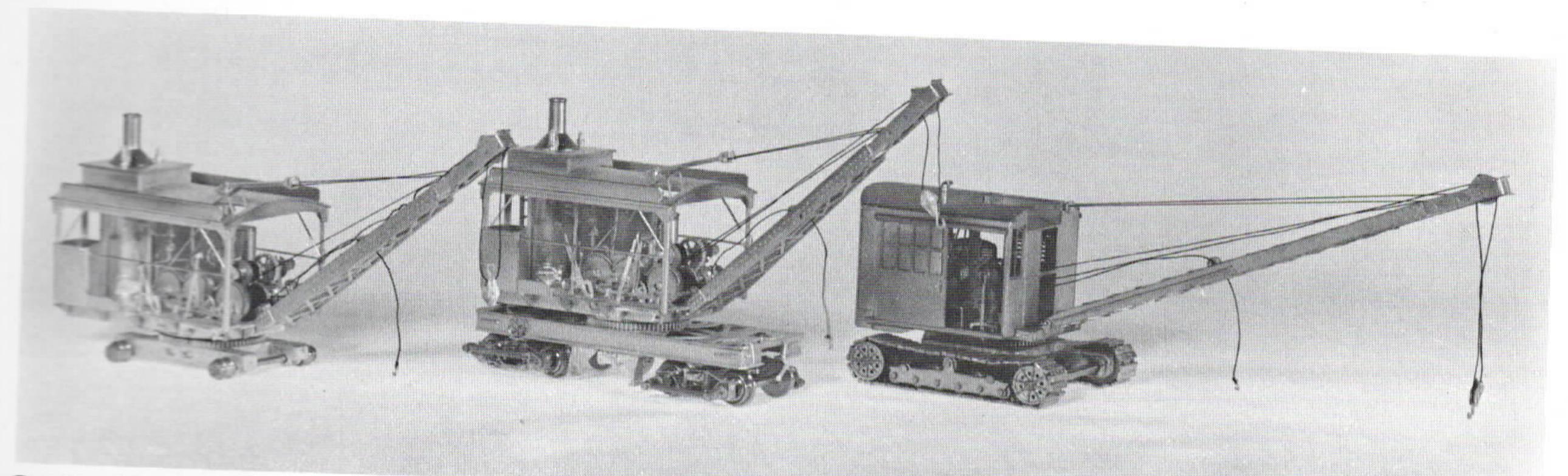
POSTAGE PAID 3rd CLASS or UPS--1st CLASS 10% Ph.602/254-9656

Postage Extra for Visa, Master Charge, American Express, and Phone Orders. Foreign Orders Welcomed!

					and Phone Or	rders. Fc	oreign Orders Welcomed!		
3079	GRANDT LINE PRODUCTS On3 UTLX Frameless Tankcar 45.00		0.10	THOMAS A. YORKE ENT.			DURANGO PRESS		
3079 -6 3100 3101	On2 Gable Bottom Ore Car On30 Gable Bottom Ore Car	240.00) 0 100	8 O Scale Brick & Stucco C			On3 RGS #01 Flanger 59.95 On3 Marion Steam Shovel 290.90		
3102 3103 3104	On3 Gable Bottom Ore Car On3 4-Wheel Side Dump Car On3 Small Tank Spout (metal)	2/10.00	534 535	On3 Code 100, #6, RH On3 Code 100, #6, LH		5 DP-20 DP-15	HO Perkins Produce HO-O Barrels N-HO Barrels		
5186 5187 5188 3072	HOn3 D&RGW 30' Flatcar HOn3 D&RGW Wheel & Tie Car HOn3 D&RGW Drop bottom gon	14.50	533	On3 Code 83, #6, RH On3 Code 83, #6, LH	10.95 10.95	5 DP-34 5 DP-76	HO Barrels HO Bridge Shoes HO-O Coal Buckets 10/ 1.95 4/ 1.50 2/ 2.50		
3012	On3 800 series drop bottom	39.50		OODLAND SCENICS (AI			THE GOULD COMPANY		
0-2	THINFILM DECALS		245 551	(Full Color Dry Transfer Sig Advertising & Depot	4 05	4021	HO 40', 50-ton Steel Flatcar Kit 8.95		
On3 On3	RGS Boxcar C&S/RGS Reefer	1.00 2.00	552	Tavern, Gas Station, Comn Assorted Business Signs	4 05		THE FLYING ZOO		
On3 Sn3 HOn3	CONOCO for Silver Tankcars CONOCO for Silver Tankcars	9.00	553 554 555	Products & Advertising	g 4.95	HOn30	SR&RL #10, 2-4-4T 229.95		
HOHO	CONOCO for Silver Tankcars	9.00	556 557	Road, Product & Burmasha Logos & Advertising	4 05		E & B VALLEY		
	GLOOR CRAFT		991	Warning Labels & Comme	ercial 4.95		HOn3 D&RGW Stock Car Kit 13.95		
339	HOn3 EBT Caboose Kit	12.95	2500	SCENTARE, INC.			TAURUS PRODUCTS		
	LA BELLE (Wood Kits-HOn3	3)	2510	Field Grass (18" x 30") Prairie Grass (18" x 30")) 0.05	000	HOn3 Wood 20' Ore Car Kit (2) 13.95		
20 21 22	D&RGW Open Platform Coach D&RGW Combine	12.75 12.75	800 1600	12 - 8 inch Pine Tree Kit 6 - 16 inch Pine Tree Kit	19.95 19.95		BOOKS		
23 24	IJE HI : W ' Alam aga!!	12.75 12.75		UNITED SCALE MODE	220	The Crip	pple Creek Road" (Midland Term.) 24.95		
25	D&RGW Closed Vest. Coach	12.75 H	HOn3 HOn3	Caddo River Lbr. 2-truck S Cowichan 2-truck Shay	Shay 345.00	"Colorado	o Mountain RR's''by LeMassens 15.95		
	our one-sto	p si	our	rce for Na	rrow		25. 00		

Your one stop source for Narrow Gauge supplies"

Logger's Delight



OMI #1333

OMI #1332

OMI #1350

Our complete line of loggers are the finest models offered. Regardless of operating location, these jewels are right at home. The Gopher Crane has a cast diesel engine, enclosed body, sliding doors and working treads. All built by M. S. Models of Korea in HO scale, OMI #1332 also includes HOn3 trucks. Watch out O scalers! Photo by R. Sorg.

Overland Models, Inc.

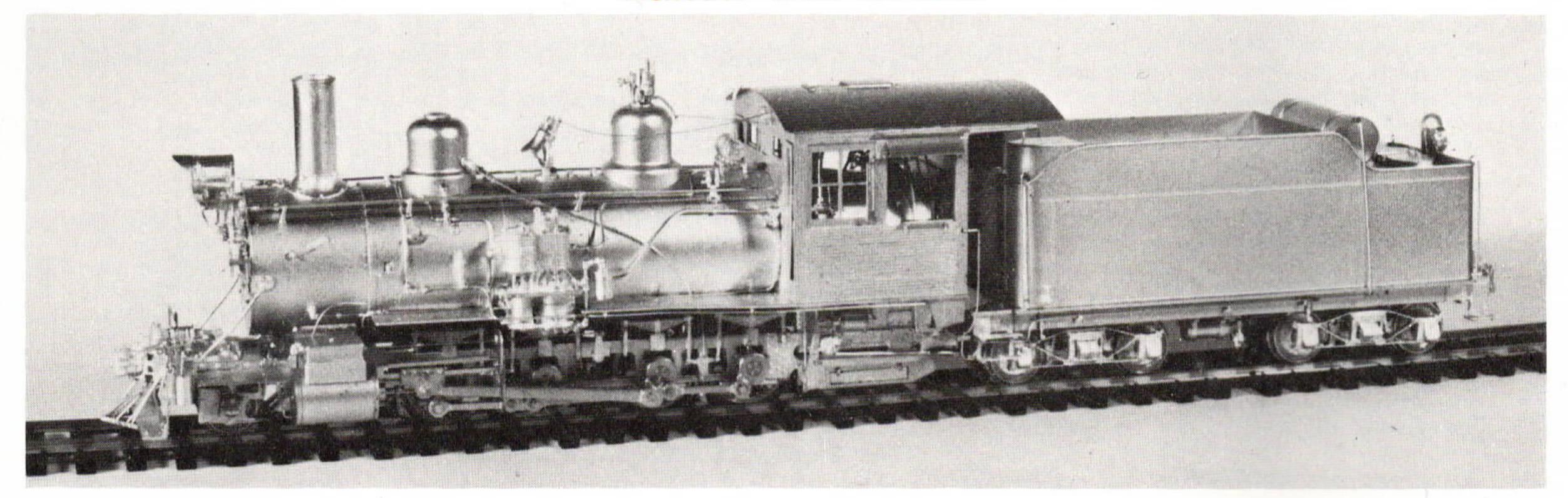
RR 12, Box 445, Muncie, Indiana 47302



LOCO'S, CABOOSES AND TRACK ALL FOR YOUR WINTER RAILROADING

1120-A GUM AVE. WOODLAND, CA 95695

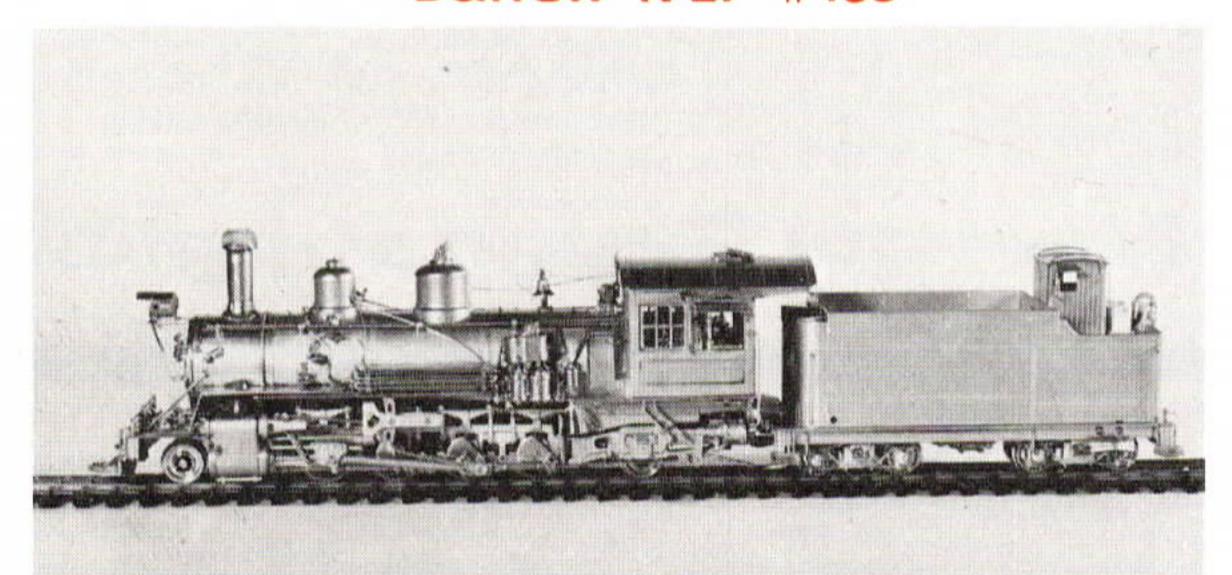
D&RGW C-25 IN ON3



Our model of #375 comes with a Canon motor, idler gear box, tender drilled for sound, sound cam mounted on first axle, parts to convert tender to switcher version and many new lost wax castings. #15057 RTR / #15057-1 RTR/Painted

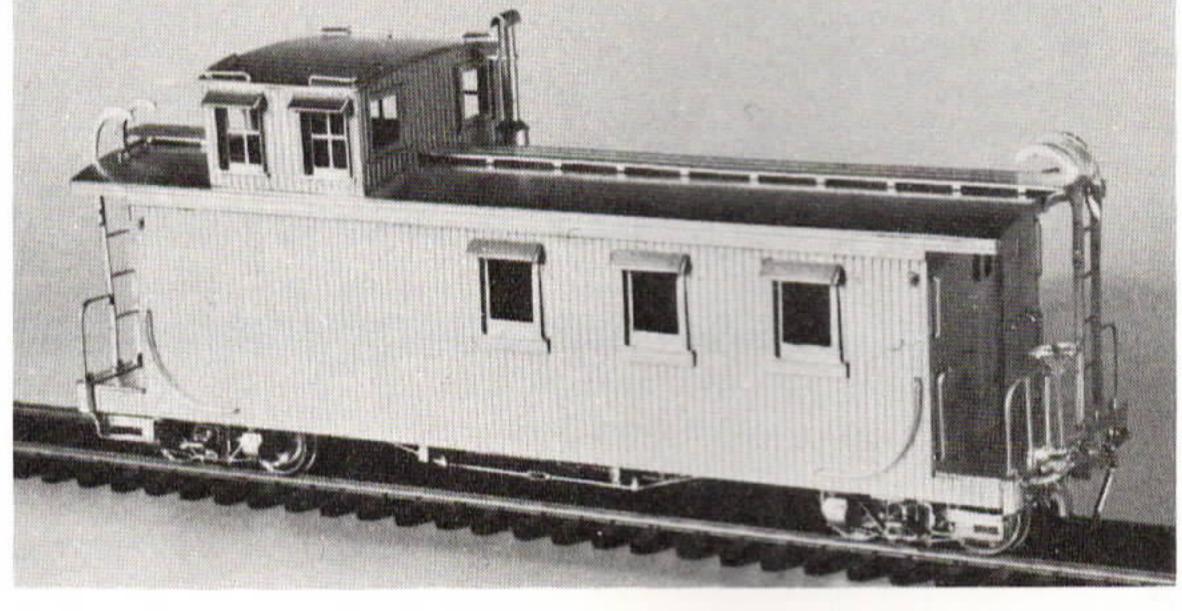
(both are in stock)

D&RGW K-27 #453



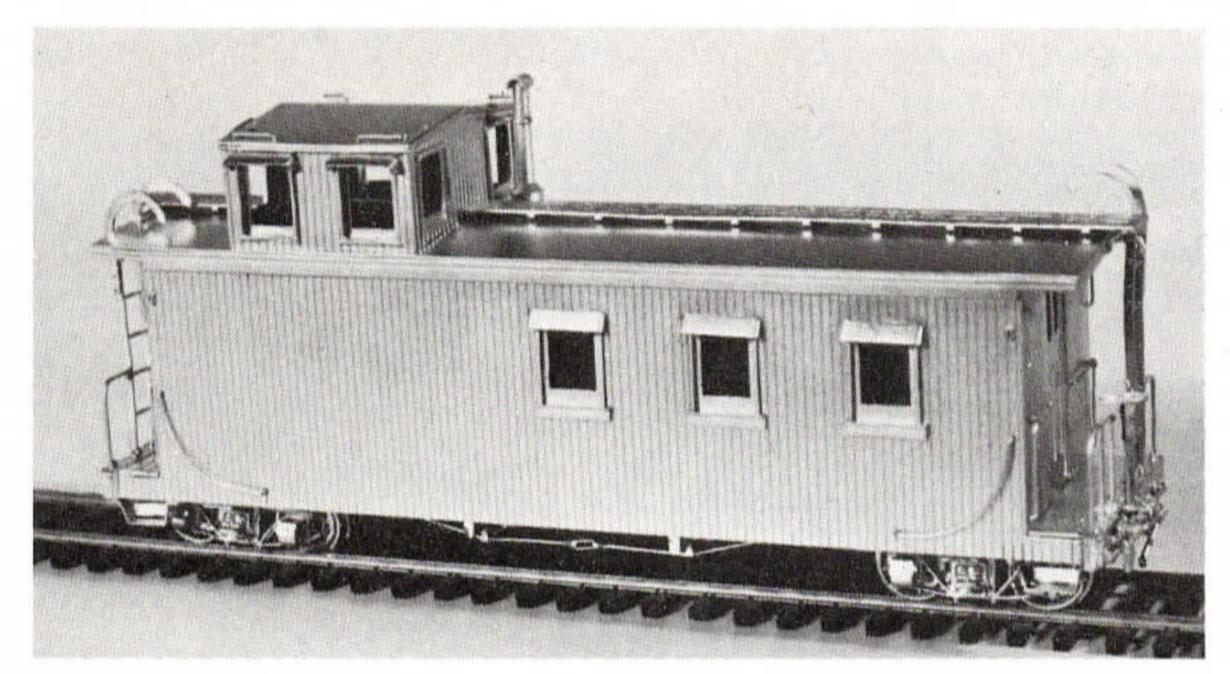
HOn3 RTR #15099



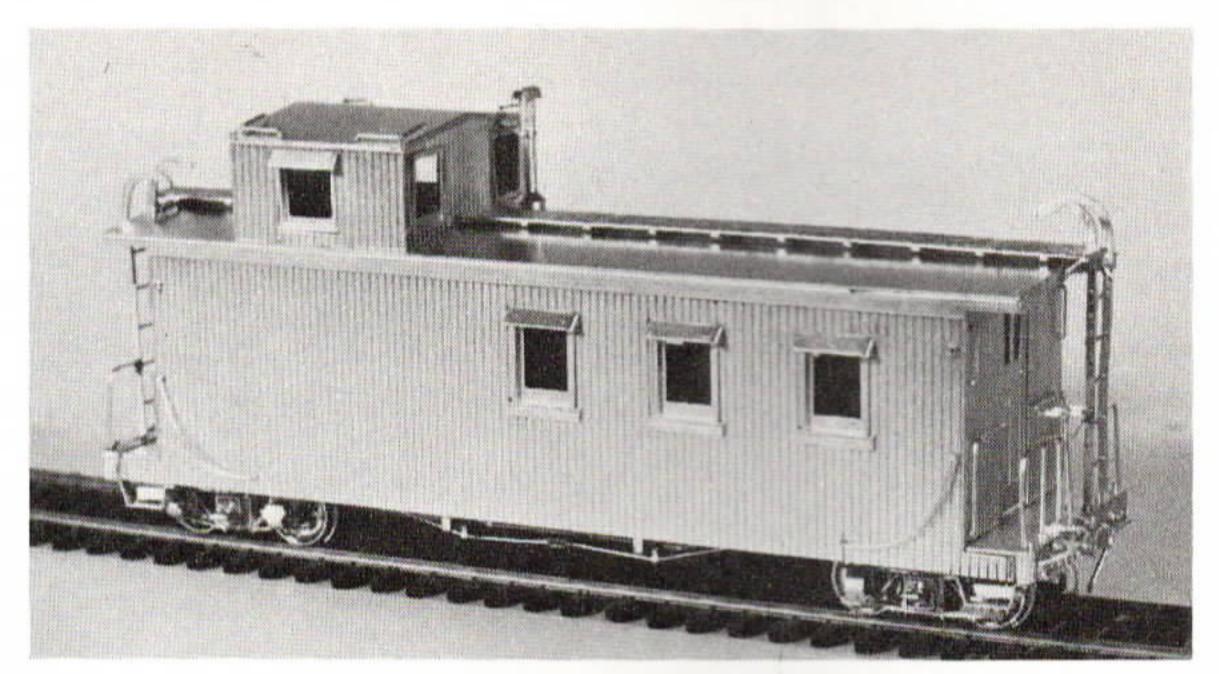


#15480 Round Roof Caboose HOn3

CABOOSES DUE IN LATE OCTOBER



#15482 Peaked Roof Caboose HOn3



TOP TRACK

#15484 Peaked Roof Single Cupola Window

TOP TRACK

Number	Gauge	Code	Type	Qty.	Price	Number	Gauge	Code	Туре	Qty.	Price
PSH-4980	On3	100	Straight Flex	Pkg. 4	\$17.80	PSH-4925	НО	100	Straight Flex	Pkg. 6	\$18.75
PSH-4081	On3	83	Straight Flex	Pkg. 4	\$17.80	PSH-4926	HO	100	Curved Flex Elevated	Pkg. 6	\$19.75
PSH-4982	On3	70	Straight Flex	Pkg. 4	\$17.80	PSH-4927	HO	83	Straight Flex	Pkg. 6	\$18.75
PSH-4983	On2	70	Straight Flex	Pkg. 4	\$17.80	PSH-4928	HO	83	Curved Flex Elevated	Pkg. 6	\$19.75
PSH-4931	HO/HOn	3 83	Mainline dual gauge	Pkg. 6	\$22.50	PSH-4929	HO	70	Straight Flex	Pkg. 6	\$18.75
PSH-4932	HO _n 3	83	Mainline D&RGW	Pkg. 6	\$18.25	PSH-4930	НО	70	Curved Flex Elevated	Pkg. 6	\$19.75

HO/HO3 PARTS CATALOG #4 IS IN STOCK NOW - \$12.50 + \$1.50 SHIPPING

SEE YOUR LOCAL PSC DEALER, FIRST!

